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STATISTICS OF WISCONSIN PUBLIC UTILITIES

1981-1980-1979

ELECTRIC, GAS, TELEPHONE
WATER AND HEATING UTILITIES

PUBLIC SERVICE COMMISSION OF WISCONSIN

Accounts and Finance Division

Bulletin No. 8

November, 1982

STATISTICS OF WISCONSIN PUBLIC UTILITIES

1981-1980-1979

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STATISTICS OF WISCONSIN PUBLIC UTILITIES

This bulletin presents a statistical summary of public utilities operating in Wisconsin during the period 1981-1979 inclusive. In addition, selected data over longer periods are shown in the text or portrayed in the charts. Some Wisconsin utilities have operations outside the State. These operations are generally excluded from the summaries but this was not possible in the case of financial data shown in Tables 1, 2, and 3.

The following table gives an indication of the relative importance of various utility services included in the report.

	Year Ending December 31, 1981		
	Average Number of Customers*#	Operating Revenues*	Net Operating Revenues*
Electric	1,845,518	$1,943,200,985	$315,746,454
Gas	1,059,395	1,352,070,180	51,079,142
Telephone	1,928,118	1,122,496,996	209,798,721
Water	919,168	124,201,189	11,658,356
Heating	712	9,864,032	1,248,324
	5,752,911	$4,551,833,382	$589,530,997

* Excludes out-of-state operations.
\# Ultimate consumers.

Chart 1 presents a comparison of trends in gross operating revenue since 1972. Gas utility revenues continue to have the greatest rate of growth with an increase of 4.0 times in 10 years. Electric and telephone revenues increased 3.1 and 2.8 times respectively while water revenues rose 1.8 times during the 10-year period. The increases are due to higher rates.

Chart 2 shows that since 1972, net operating telephone revenues have risen 2.9 times, electric revenues 2.8 times, water revenues 1.4 times, and gas revenues 1.3 times.

CHART 1
COMPARATIVE TRENDS OF OPERATING REVENUES

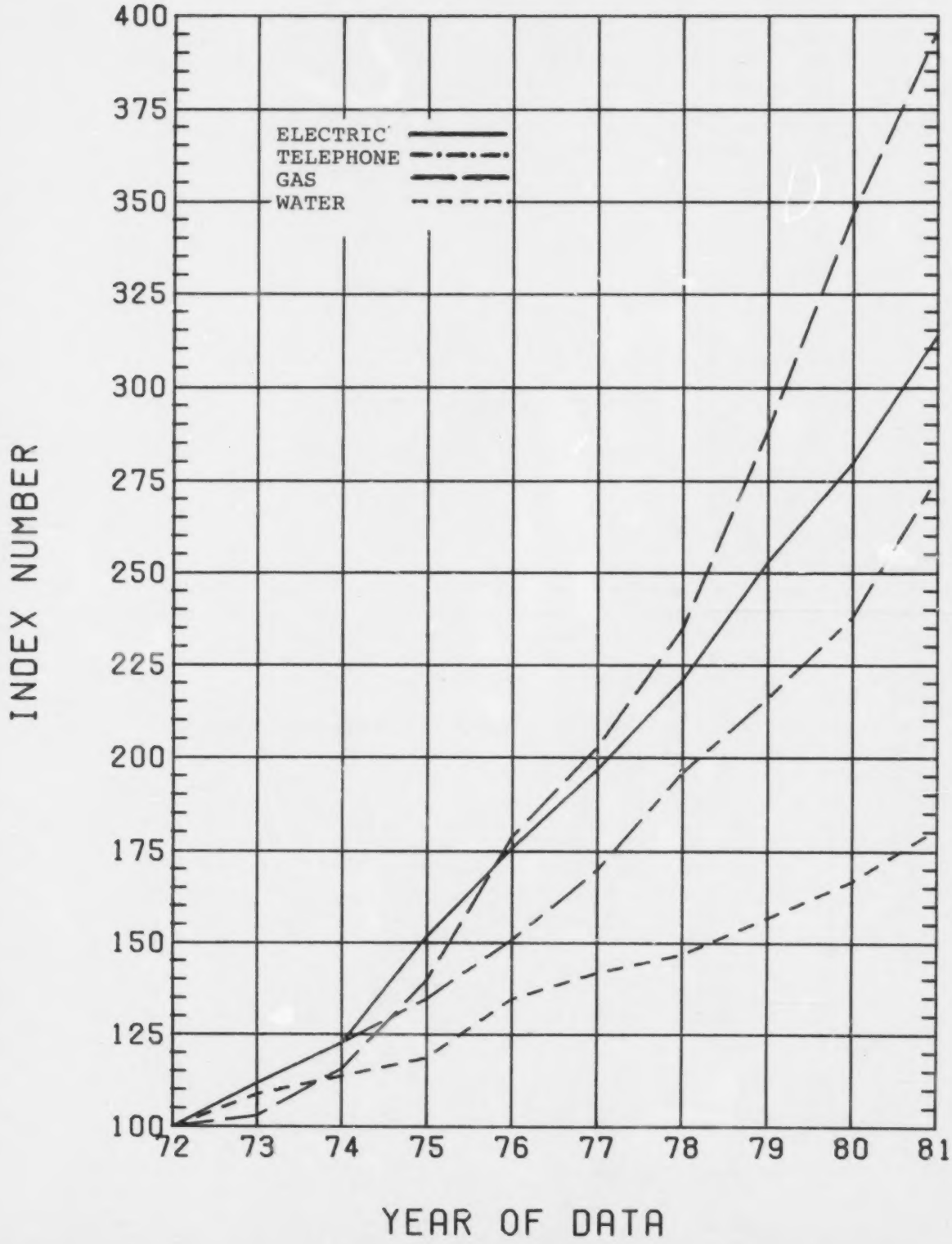
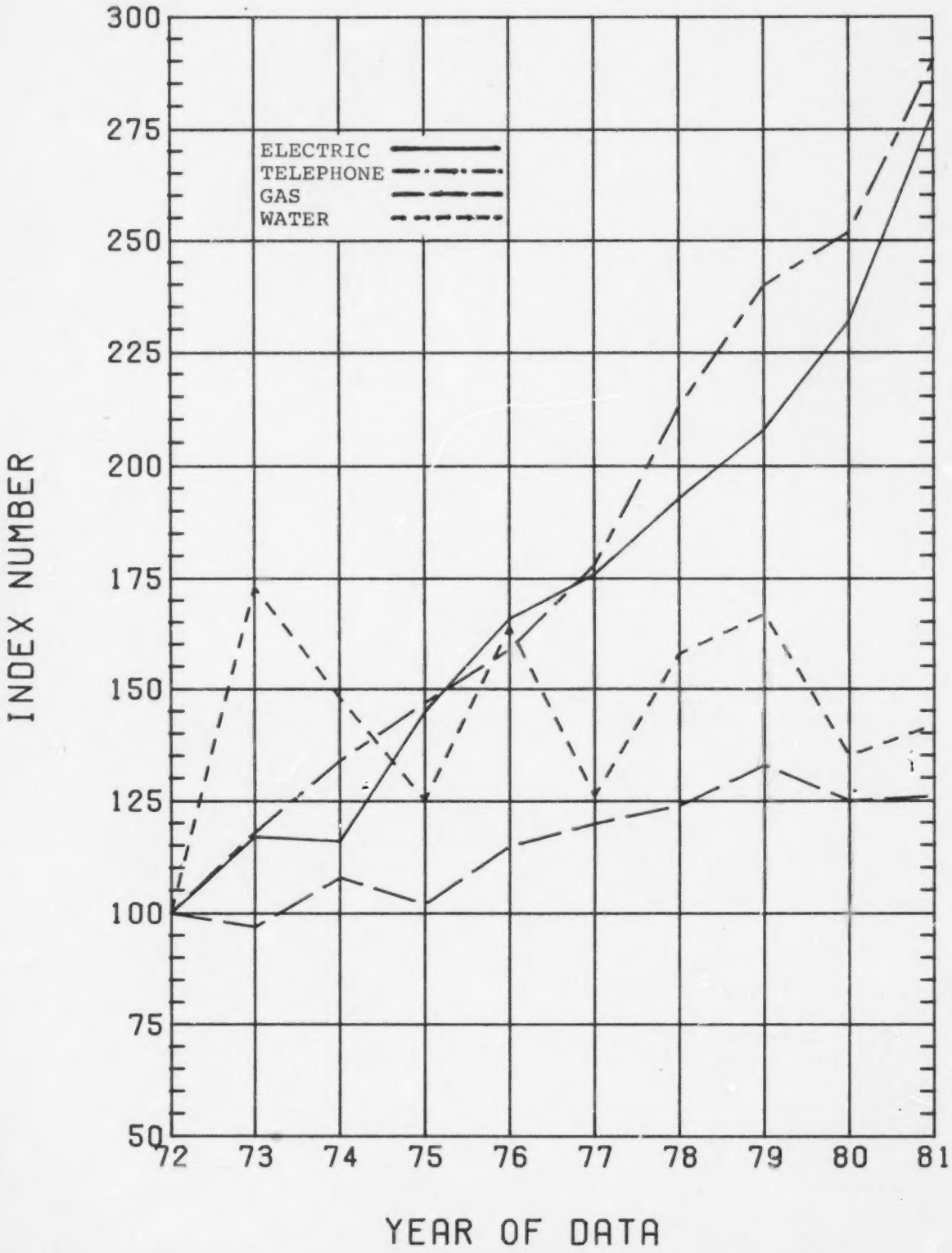


CHART 2
COMPARATIVE TRENDS OF NET OPERATING REVENUES



The number of public utilities operating in the State as of December 31, 1981 is summarized below: These figures include all utilities regardless of size.

	Total	Private	Municipal
Electric	99	14	85
Gas	16	15	1
Telephone	125*	125*	0
Water	562	15	547
Heating	3	2	1
Total	805	171	634

* Includes 2 roadway companies and 14 radio-telephone service companies. Does not include two Illinois based utilities that serve a few customers in Wisconsin.

FINANCIAL STATISTICS

Statistics on plant investment, capitalization and disposition of income are presented in this section of the bulletin. These data necessarily include all operations of Wisconsin utilities, including out-of-state operations of those utilities operating in neighboring states.

A number of municipalities include nonutility sewer operations in their water utility reports. Figures on income and capitalization reflect these operations when reported. It is to be emphasized, however, that sewer coverage presented herein is by no means complete since many municipalities operate their nonutility sewer departemnts independently and do not report those operations.

Utility Plant in Service and Accumulated Provisions for Depreciation

Table 1 presents a summary of utility plant in service and accumulated provisions for depreciation of Wisconsin utilities during the period from 1979 through 1981. Charts 3, 4 and 5 show similar data in graphic form over the past 10 years.

About $9.8 billion are invested in utility plant by Wisconsin utilities. Of this amount, electric plant makes up 47.5% with telephone, water and gas plant amounting to 31.0%, 10.2% and 9.8% respectively. Sewer and heating plant make up another 1.5%.

Electric cooperatives and companies engaged in intrastate transmission of natural gas do not fall under the jurisdiction of the Wisconsin Public Service Commission and therefore, data covering these companies are not included in this study. Electric cooperatives did have gross plant investment in Wisconsin of about $627 million as of December 31, 1981. Gas pipeline companies had about $223.8 million in gross plant as of the same date.

Except for water and sewer service, public utility operations in Wisconsin are predominantly under private management. For example, municipalities own and operate 98% of the total water plant but only 4% of the electric plant, about 0.05% of the gas distribution plant and no telephone plant.

As of December 31, 1981, Wisconsin electric utilities had accumulated provisions for depreciation equal to 40% of electric plant in service. Telephone utilities had accumulated 24%, water utilities 20% and gas utilities 38%. The comparable figures in 1972 were 30%, 23%, 19% and 22% respectively.

Charts 3, 4 and 5 show that utility plant in service has increased steadily over the past 10 years. Electric utility plant has increased 111% since 1972. Telephone plant is up 115% while water and gas plant increased 72% and 49% for the period.

Capitalization

Capitalization of public utilities in Wisconsin is summarized in Table 2 and Charts 6 and 7. Total capitalization was about $6,956 million in 1981. Of that amount 82% was accounted for by private utilities with the remaining 18% being municipal investment.

Total capitalization was up 4% over 1980, and 74% over the past 10 years. The corresponding figures are 4% and 73% for private utilities and 5% and 80% for municipals. Charts 6 and 7 give graphic representation of these figures.

CHART 3

UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION

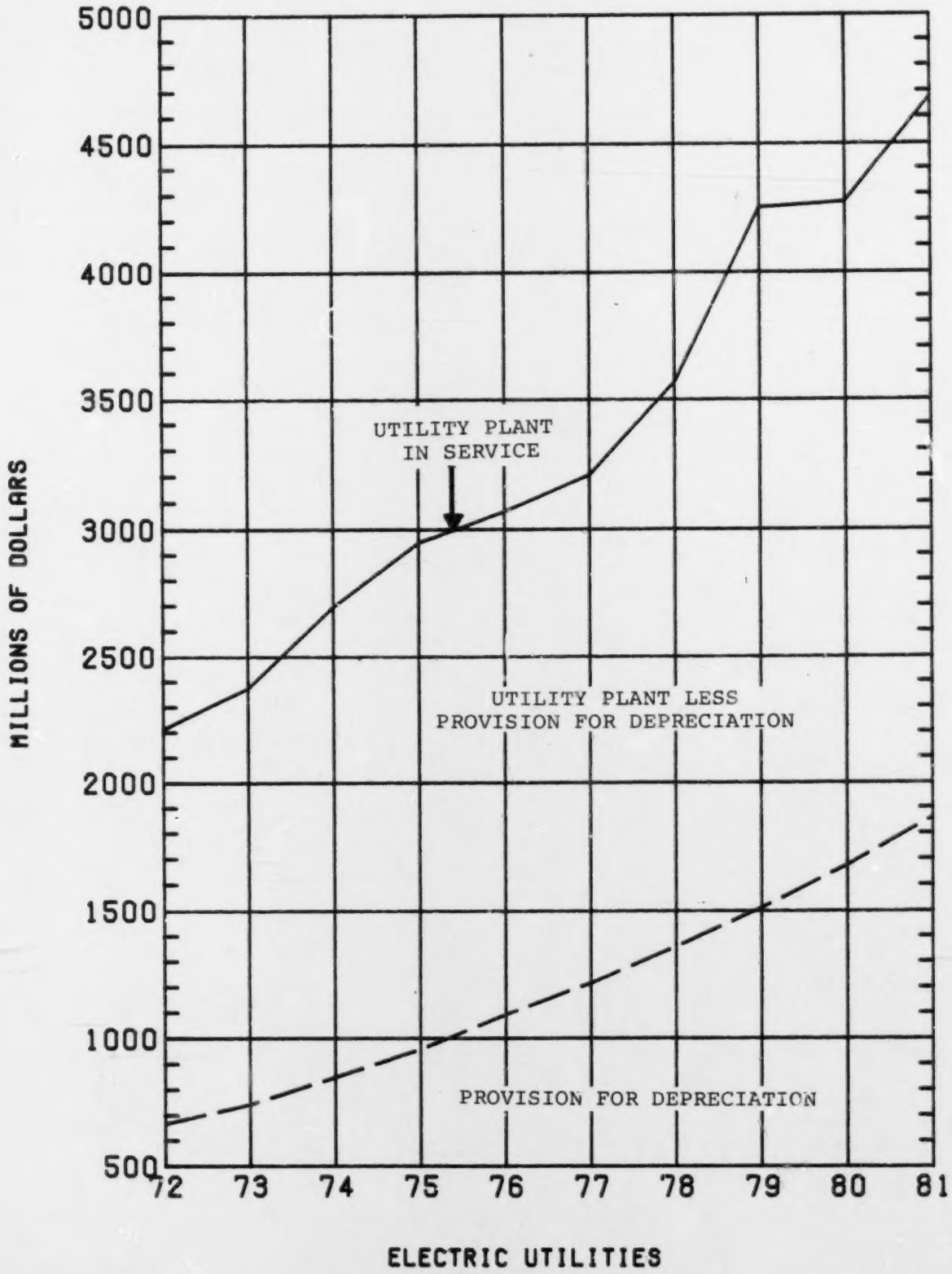


CHART 4

UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION

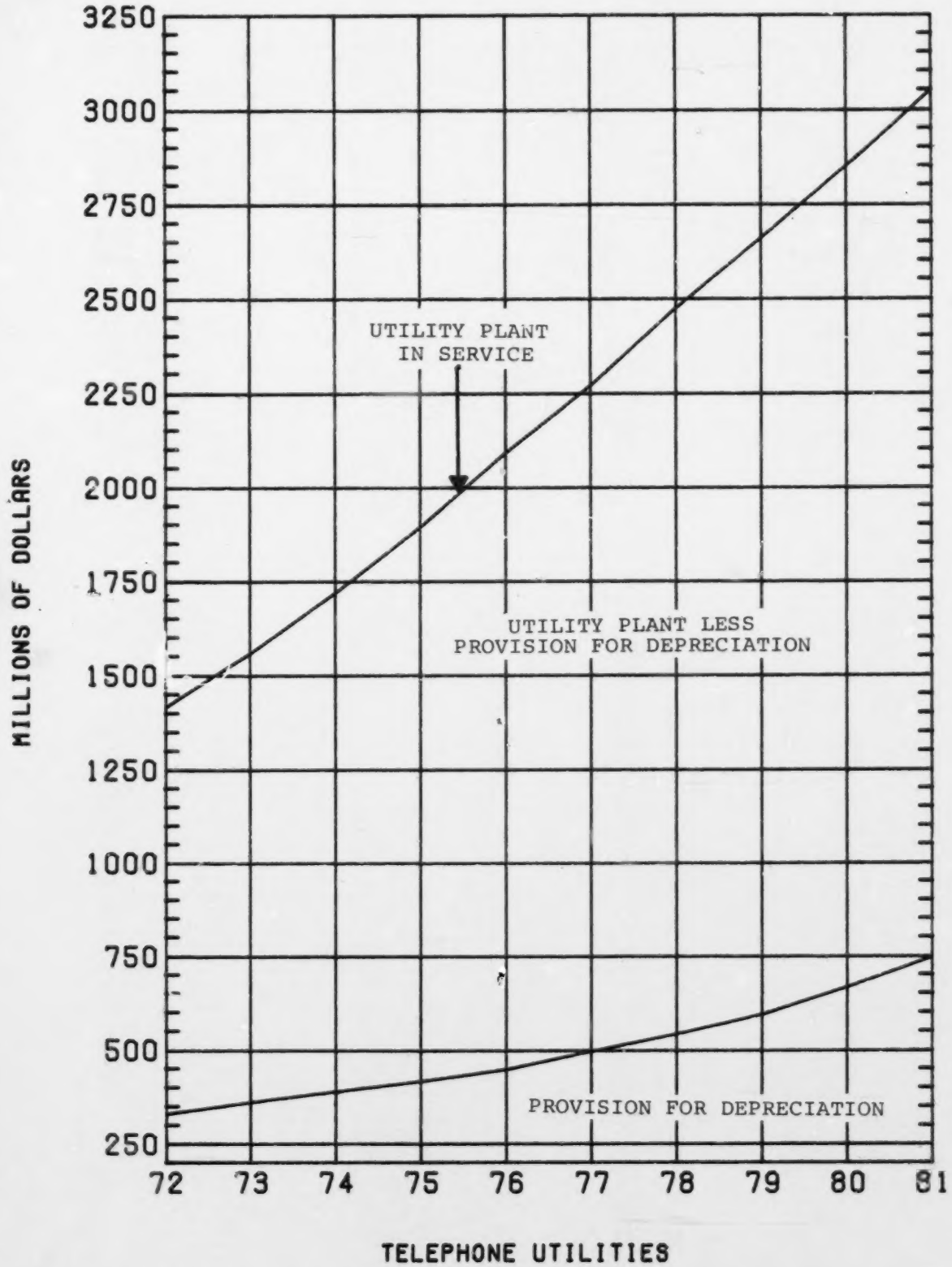
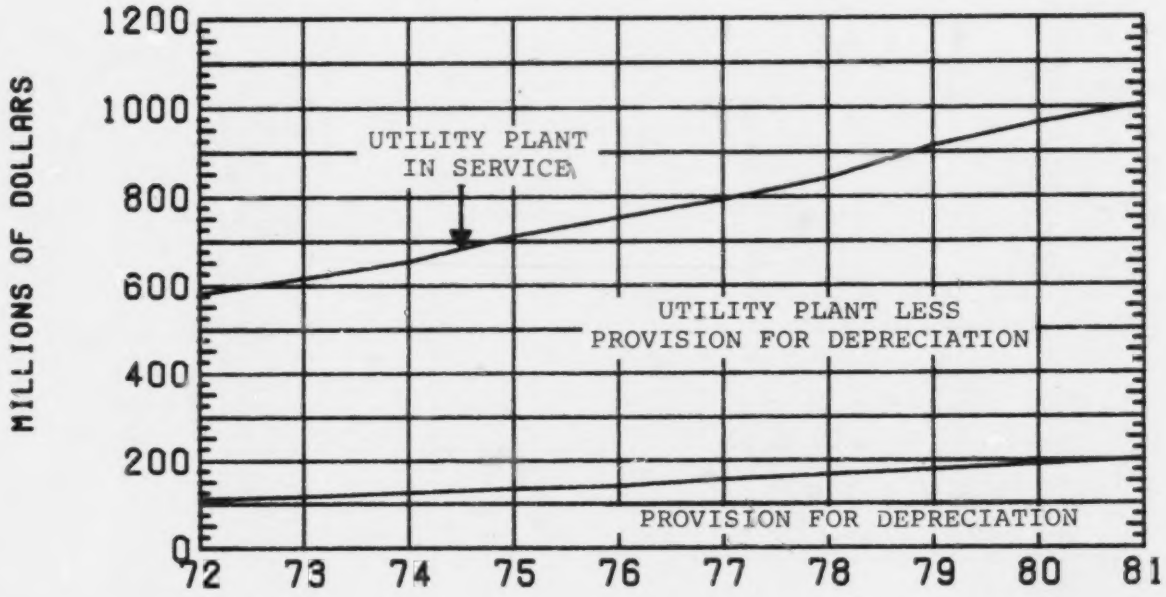
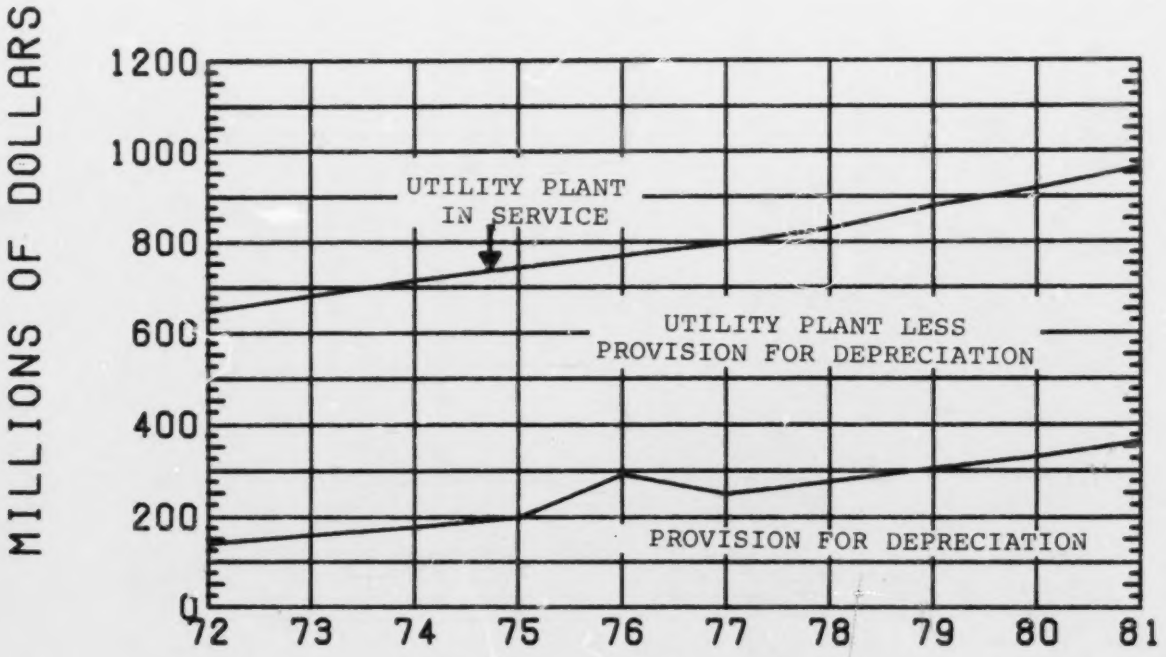


CHART 5

UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION



WATER UTILITIES



GAS UTILITIES

CHART 6
CAPITALIZATION OF PRIVATE UTILITIES OPERATING IN WISCONSIN

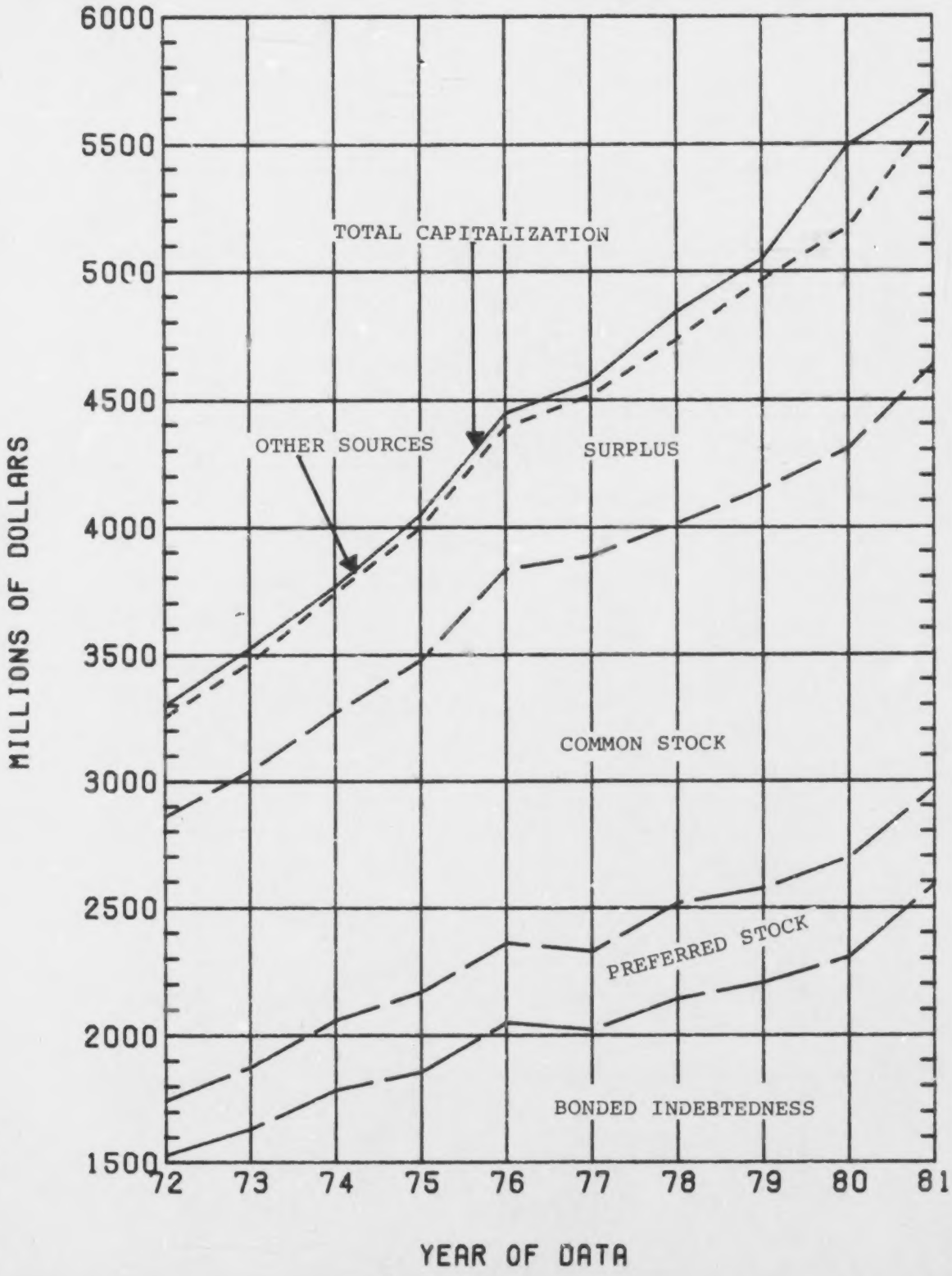


CHART 7

CAPITALIZATION OF MUNICIPAL PUBLIC UTILITIES OPERATING IN WISCONSIN

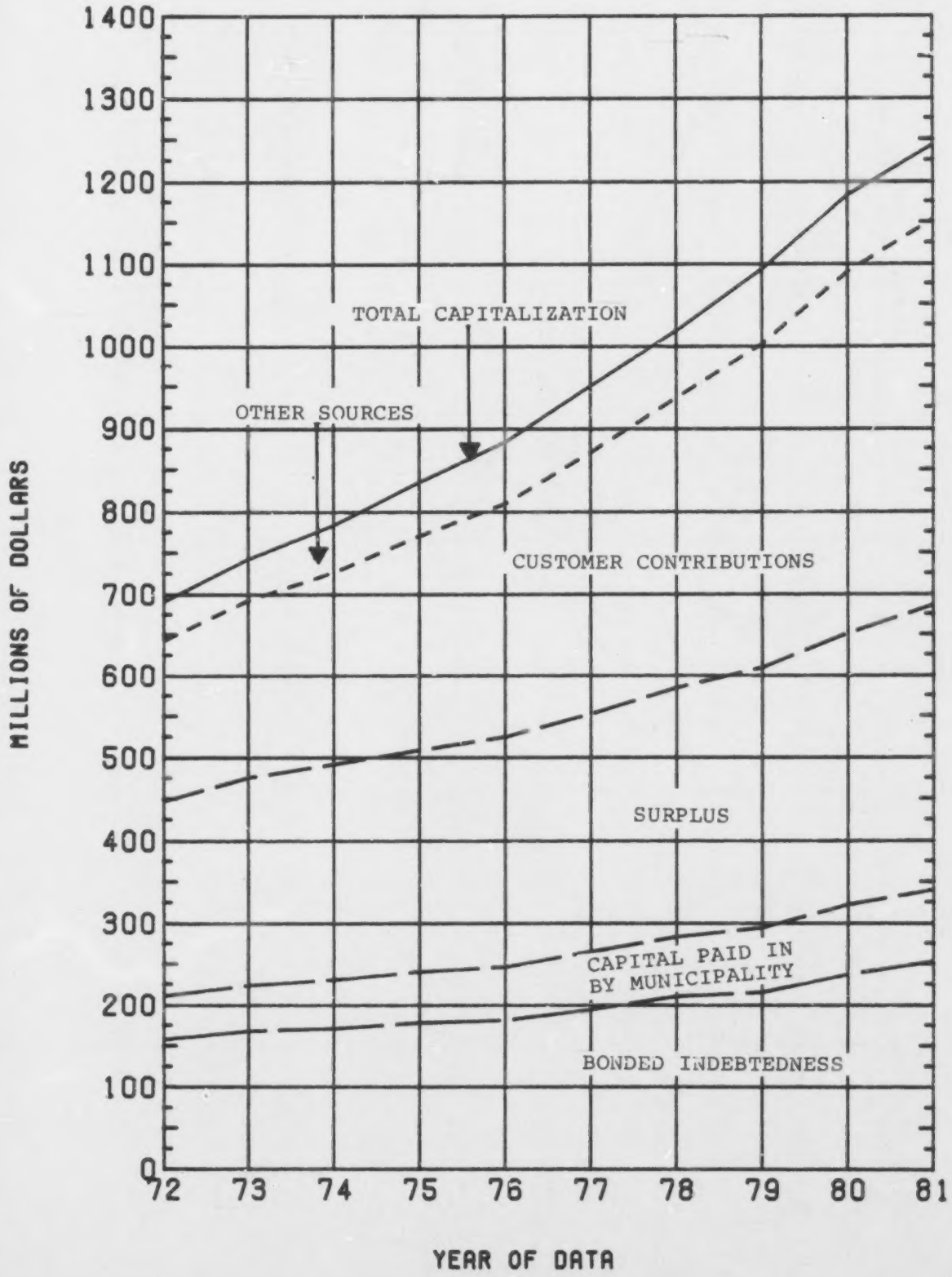


Chart 6 further shows bonds and common stock continue to be the largest source of capital for private utilities. Surplus also contributes a substantial share of total capitalization.

As shown below, Contributions in Aid of Construction is the largest item of municipal utility Capitalization. Surplus and Bonded Debt are next in size. Capital Paid in by Municipalities was only about 7.0% of the total at the end of 1981.

A comparison of the capitalization of private and municipal utilities as of December 31, 1981 is presented below:

	Private Utilities	Municipal Utilities
Bonded Indebtedness	45.4%	20.4%
Common Stock or Capital Paid in by Municipality	29.2	7.0
Preferred Stock	6.7	0.0
Surplus	16.9	27.8
Advances from Affiliates or Municipalities	0.3	7.0
Contributions in Aid of Construction	1.3	37.6
Customer Advances in Aid of Construction	0.2	0.2
Total	100.0%	100.0%

Disposition of Income

The term "gross income" as used here, is a net figure representing total income available to meet interest payments, dividends and similar items. The disposition of gross income is summarized in Table 3 and Charts 8 and 9.

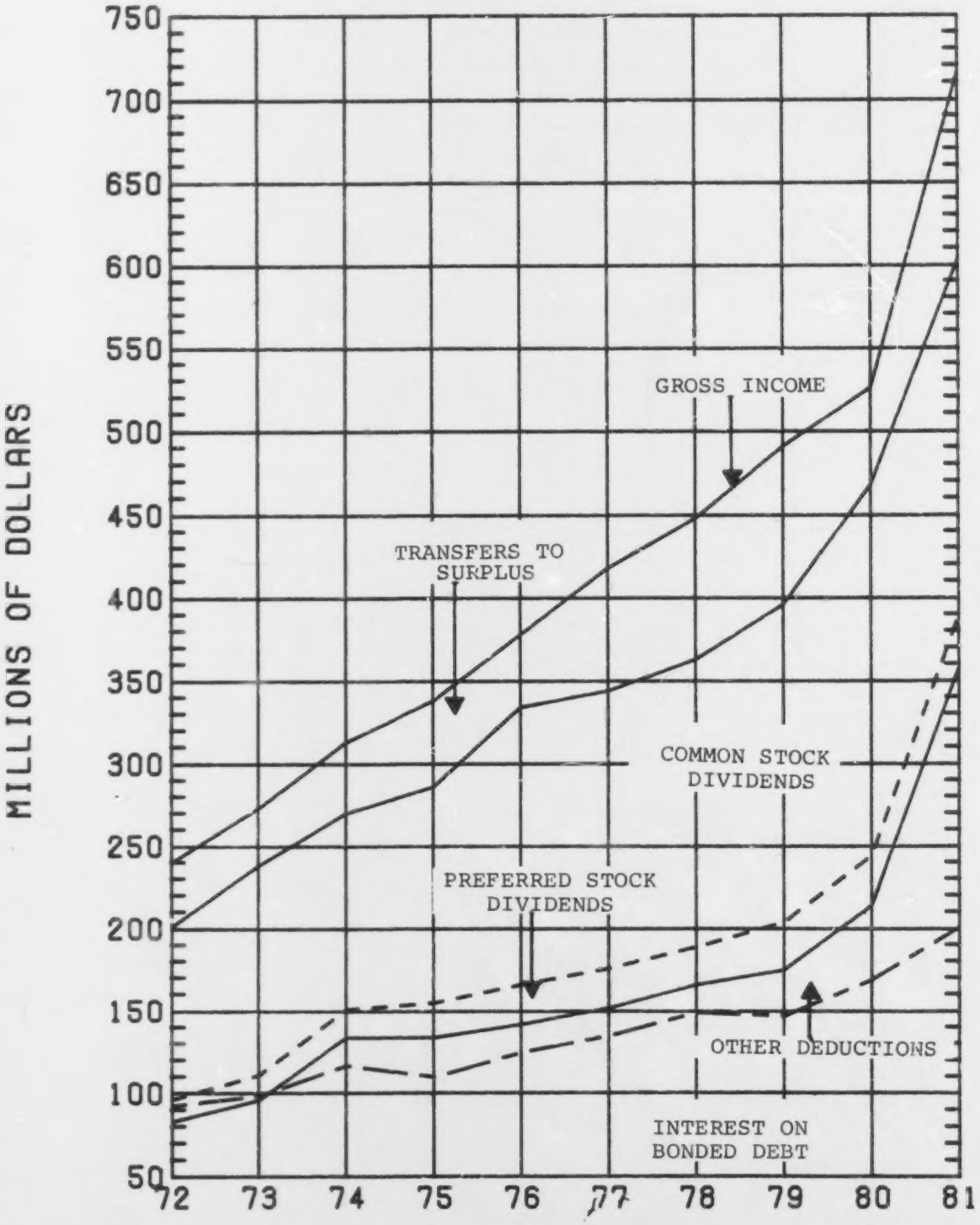
Total gross income of private utilities in Wisconsin totaled $617.1 million in 1981, 17% above the preceding year. Interest and related deductions absorbed $257.8 million, preferred stock dividends $32.6 million, dividends on common stock $213.8 million, and $112.9 million were carried to surplus.

Municipal utilities had $30.8 million in gross income in 1981, up 5% from the preceding year. Interest and related charges amounted to $18.4 million, $923 thousand were appropriated to municipalities, and $11.4 million were carried to surplus.

Payments during 1981 on each class of security or equity, expressed as a percent of average book values at the beginning and close of the year are compared below:

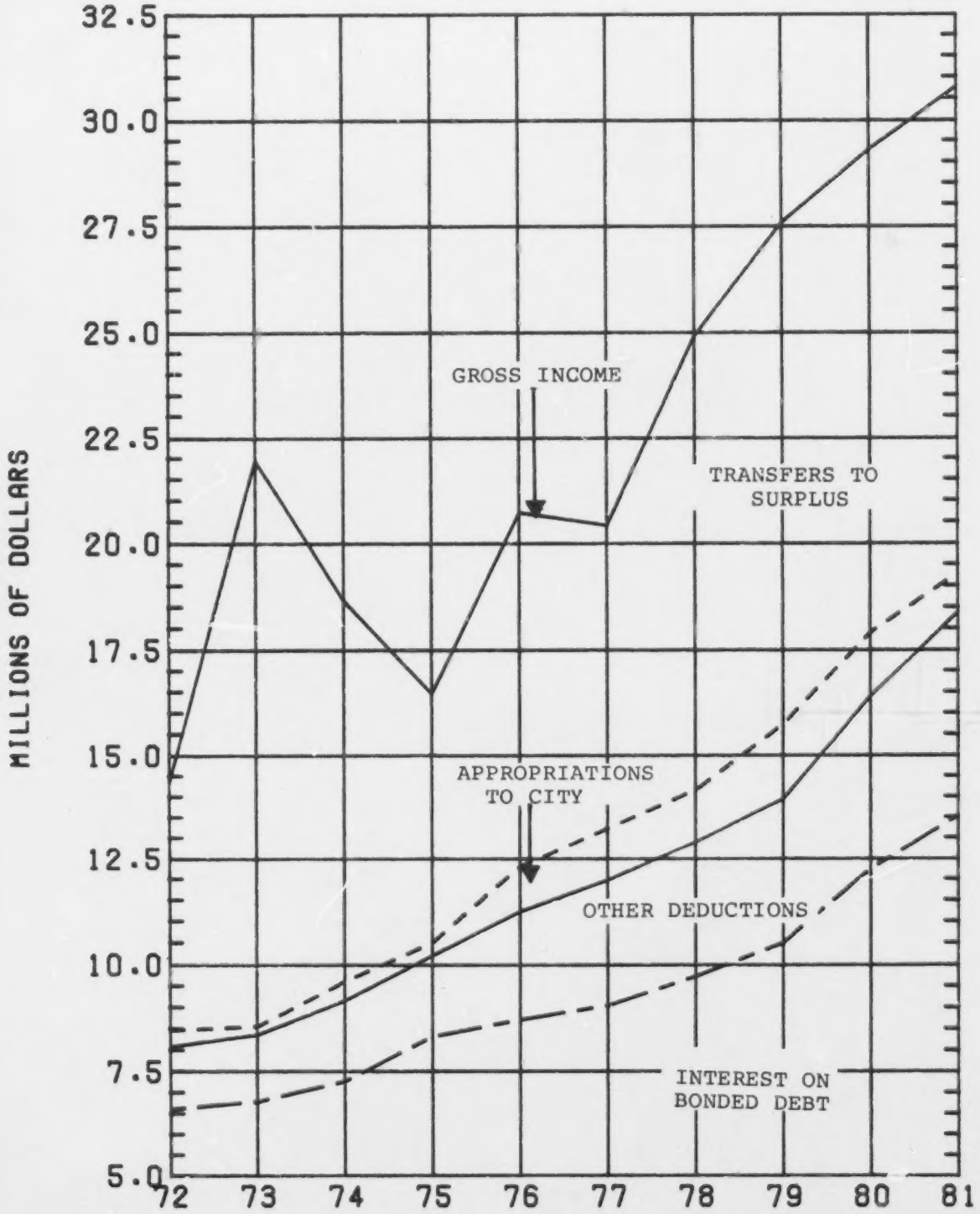
	Private Utilities	Municipal Utilities
Interest on Long-Term Debt Divided by Long-Term Debt	7.77%	5.32%
Perferred Stock Dividends Divided by Preferred Stocks	8.51	0.00
Common Stock Dividends Divided by Common Stock	12.81	0.00
Appropriations to City Divided by Capital Paid in by Municipality	0.0	1.06
Common Stock Dividends Divided by Common Stock Plus Surplus	8.12	0.00
Appropriations to City Divided by Capital Paid in by Municipality Plus Surplus	0.00	0.21

CHART 8 - DISPOSITION OF GROSS INCOME**
PRIVATE PUBLIC UTILITIES OPERATING IN WISCONSIN



**INCOME AVAILIABLE FOR INTEREST AND DIVIDENDS

CHART 9 - DISPOSITION OF GROSS INCOME** MUNICIPAL PUBLIC UTILITIES OPERATING IN WISCONSIN



**INCOME AVAILIABLE FOR INTEREST AND APPROPRIATIONS TO CITY.

TABLE 1

SUMMARY OF UTILITY PLANT IN SERVICE AND
ACCUMULATED PROVISION FOR DEPRECIATION
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1981-1979

	Dec. 31, 1981	Dec. 31, 1980	Dec. 31, 1979
All Utilities			
Utility Plant in Service 2/ 3/			
Electric	$4,681,252,066	$4,275,211,337	$4,254,127,955
Gas	965,172,327	918,789,377	879,876,136
Water	1,005,689,786	965,635,015	915,212,217
Sewer	133,700,837	112,634,298	110,376,638
Telephone	3,051,559,733	2,851,685,835	2,662,188,913
Heating	18,894,027	18,524,317	17,971,817
Total	$9,856,268,776	$9,142,480,179	$8,839,753,676
Accumulated Provision for Depreciation 2/ 3/			
Electric	$1,865,440,601	$1,678,559,922	$1,513,644,454
Gas	364,194,733	330,834,663	304,607,302
Water	203,784,705	192,100,006	180,006,811
Sewer	19,469,735	18,416,932	18,353,152
Telephone	748,043,825	668,893,772	595,509,847
Heating	8,866,754	8,357,198	7,767,886
Total	$3,209,800,353	$2,897,162,493	$2,619,889,452
Utility Plant Less Provision for Depreciation 2/ 3/			
Electric	$2,815,811,465	$2,596,651,415	$2,740,483,501
Gas	600,977,594	587,954,714	575,268,834
Water	801,905,081	773,535,009	735,205,406
Sewer	114,231,102	94,217,366	92,023,484
Telephone	2,303,515,908	2,182,792,063	2,066,679,066
Heating	10,027,273	10,167,119	10,203,931
Total	$6,646,468,423	$6,245,317,686	$6,219,864,224
Private Utilities			
Utility Plant in Service 2/ 3/			
Electric	$4,477,934,938	$4,083,405,456	$4,069,842,967
Gas	964,636,375	918,305,483	879,432,080
Water	18,893,425	18,383,407	17,325,861
Sewer	145,897	145,897	145,897
Telephone	3,051,559,733	2,851,685,835	2,662,188,913
Heating	18,802,595	18,433,190	17,883,708
Total	$8,531,972,963	$7,890,359,268	$7,646,819,426

TABLE 1 (Concluded)

SUMMARY OF UTILITY PLANT IN SERVICE AND
ACCUMULATED PROVISION FOR DEPRECIATION
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1981-1979

	Dec. 31, 1981	Dec. 31, 1980	Dec. 31, 1979
Private Utilities (Cont.)			
Accumulated Provision for Depreciation 2/ 3/			
Electric	$1,778,017,498	$1,595,667,295	$1,436,356,292
Gas	364,026,213	330,681,857	304,468,228
Water	4,771,911	4,482,381	4,211,221
Sewer	54,130	51,486	48,842
Telephone	748,043,825	668,893,772	595,509,847
Heating	8,810,886	8,302,898	7,714,421
Total	$2,903,724,463	$2,608,079,689	$2,348,308,851
Utility Plant Less Provision For Depreciation 2/ 3/			
Electric	$2,699,917,440	$2,487,738,161	$2,633,486,675
Gas	600,610,162	587,623,626	574,963,852
Water	14,121,514	13,901,026	13,114,640
Sewer	91,767	94,411	97,055
Telephone	2,303,515,908	2,182,792,063	2,066,679,066
Heating	9,991,709	10,130,292	10,169,287
Total	$5,628,248,500	$5,282,279,579	$5,298,510,575
Municipal Utilities			
Utility Plant in Service 2/			
Electric	$ 203,317,128	$ 191,805,881	$ 184,284,988
Gas	535,952	483,894	444,056
Water	986,796,361	947,251,608	897,886,356
Sewer	133,554,940	112,488,401	110,230,741
Heating	91,432	91,127	88,109
Total	$1,324,295,813	$1,252,120,911	$1,192,934,250
Accumulated Provision for Depreciation 2/			
Electric	$ 87,423,103	$ 82,892,627	$ 77,288,162
Gas	168,520	152,806	139,074
Water	199,012,794	187,617,625	175,795,590
Sewer	19,415,605	18,365,446	18,304,310
Heating	55,868	54,300	53,465
Total	$ 306,075,890	$ 289,082,804	$ 271,580,601
Utility Plant Less Provision for Depreciation 2/			
Electric	$ 115,894,025	$ 108,913,254	$ 106,996,826
Gas	367,432	331,088	304,982
Water	787,783,567	759,633,983	722,090,766
Sewer	114,139,335	94,122,955	91,926,431
Heating	35,564	36,827	34,644
Total	$1,018,219,923	$ 963,038,107	$ 921,353,649

1/ Total plant includes out-of-state properties.
2/ Including apportionment of common property.
3/ Excluding utility plant leased to others.

TABLE 2

COMPARATIVE STATEMENT OF CAPITALIZATION
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1981-1979

	Dec. 31, 1981	Dec. 31, 1980	Dec. 31, 1979
All Utilities			
Long-Term Debt Outstanding	$2,844,807,733	$2,546,852,026	$2,456,852,026
Advances from Affiliates or Municipality	105,706,786	331,189,592	103,638,993
Preferred Stock Outstanding	382,929,135	388,624,360	366,370,700
Common Stock Outstanding and Related Accounts	1,668,479,003	1,614,303,437	1,575,588,016
Capital Paid in by Municipality	87,314,355	84,714,416	78,840,333
Surplus	1,309,320,249	1,192,333,781	1,131,215,154
Customers' Advances in Aid of Construction	13,126,624	15,601,312	13,338,871
Contributions in Aid of Construction	544,287,786	504,919,667	449,474,979
Total	$6,955,971,671	$6,678,538,591	$6,144,629,819
Private Utilities			
Long-Term Debt Outstanding	$2,590,371,947	$2,309,087,418	$2,210,622,196
Advances from Affiliates	18,006,151	241,650,818	15,074,961
Preferred Stock Outstanding	382,929,135	388,624,360	366,370,700
Common Stock Outstanding and Related Accounts	1,668,479,003	1,614,303,437	1,575,588,016
Surplus	963,557,814	863,319,534	816,102,266
Customers' Advances in Aid of Construction	10,623,878	12,062,599	10,517,697
Contributions in Aid of Construction	76,242,075	66,157,324	56,617,452
Total	$5,710,210,003	$5,495,205,490	$5,050,893,288
Municipal Utilities			
Long-Term Debt Outstanding	$ 254,435,786	$ 237,764,608	$ 215,540,577
Advances from Municipality	87,700,635	89,538,774	88,564,032
Capital Paid in by Municipality	87,314,355	84,714,416	78,840,333
Surplus	345,762,435	329,014,247	315,112,888
Customers' Advances in Aid of Construction	2,502,746	3,538,713	2,821,174
Contributions in Aid of Construction	468,045,711	438,762,343	392,857,527
Total	$1,245,761,668	$1,183,333,101	$1,093,736,531

1/ These data necessarily represent total company figures. A few companies operate outside of Wisconsin. Electric, gas, water, sewer, heating and telephone utilities are included.

TABLE 3

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1981-1979

	1981	1980	1979
All Utilities			
Net Operating Revenues			
Electric	$ 320,819,598	$ 267,262,876	$ 239,124,090
Gas	51,298,396	53,483,512	54,464,316
Telephone	209,798,721	182,229,838	173,325,634
Water	11,622,470	11,058,962	13,686,472
Sewer	(308,586)	(204,095)	46,360
Steam and Hot Water Heating	1,248,324	969,985	733,624
Total	$ 594,478,923	$ 514,801,078	$ 481,380,496
Income from Plant Leased to Others	$ 95,231	$ 45,814	$ 56,986
Income from Merchandising and Jobbing	291,388	337,146	145,333
Other Income - Net	53,026,713	39,842,030	36,731,231
Gross Income	$ 647,892,255	$ 555,026,068	$ 518,314,046
Interest on Long-Term Debt	$ 214,924,999	$ 181,417,582	$ 157,075,416
Amortization of Debt Discount and Premium	2,044,285	1,606,804	1,278,554
Interest on Debt to Associated Companies or City	12,206,227	7,610,715	2,775,076
Other Deductions	47,043,320	40,092,468	27,993,021
Net Income	$ 371,673,424	$ 324,298,499	$ 329,191,979
Dividend Appropriations on Preferred Stock	$ 32,593,024	$ 29,601,837	$ 28,877,470
Dividend Appropriations on Common Stock 2/	213,769,893	224,070,921	191,824,432
Appropriations to City	923,597	1,508,894	1,796,811
Balance Transferred to Surplus	$ 124,386,910	$ 69,116,847	$ 106,693,266

(Continued)

TABLE 3 (Continued)

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1981-1979

	1981	1980	1979
Private Utilities			
Net Operating Revenues			
Electric	$ 317,383,163	$ 261,798,075	$ 234,124,198
Gas	51,296,816	53,471,706	54,439,925
Telephone	209,798,721	182,229,838	173,325,634
Water	871,482	666,752	542,326
Sewer	(8,952)	(1,064)	1,361
Steam and Hot Water Heating	1,266,141	977,083	741,829
Total	$ 580,607,371	$ 499,142,390	$ 463,175,273
Income from Plant Leased to Others	$ 94,331	$ 44,914	$ 56,086
Income from Merchandising and Jobbing	156,753	164,614	59,280
Other Income - Net	36,246,526	26,365,103	27,438,406
Gross Income	$ 617,104,981	$ 525,717,021	$ 490,729,045
Interest on Long-Term Debt	$ 201,378,889	$ 169,157,829	$ 146,558,104
Amortization of Debt Discount and Premium	1,691,614	1,332,967	1,081,350
Interest on Debt to Associated Companies	7,992,213	3,711,901	(533,343)
Other Deductions	46,768,921	40,121,901	28,060,483
Net Income	$ 359,273,344	$ 311,392,423	$ 315,562,451
Dividend Appropriations on Preferred Stock	$ 32,593,024	$ 29,601,837	$ 28,877,470
Dividend Appropriations on Common Stock 2/	213,769,893	224,070,921	191,824,432
Balance Transferred to Surplus	$ 112,910,427	$ 57,719,665	$ 94,860,549

TABLE 3 (Concluded

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1981-1979

	1981	1980	1979
Municipal Utilities			
Net Operating Revenues			
Electric	$ 3,436,435	$ 5,464,801	$ 4,882,706
Gas	1,580	11,806	24,391
Water	10,750,988	10,392,210	13,144,146
Sewer	(299,634)	(203,031)	44,999
Steam and Hot Water Heating	(17,817)	(7,098)	(8,205)
Total	$ 13,871,552	$ 15,658,688	$ 18,205,223
Income from Plant Leased to Other	$ 900	$ 900	$ 900
Income from Merchandising and Jobbing	134,635	172,532	86,053
Other Income - Net	16,780,187	13,476,927	9,292,825
Gross Income	$ 30,787,274	$ 29,309,047	$ 27,585,001
Interest on Long-Term Debt	$ 13,546,110	$ 12,259,753	$ 10,517,312
Amortization of Debt Discount and Premium	352,671	273,837	197,204
Interest on Debt to City	4,214,014	3,898,814	3,308,419
Other Deductions	274,399	(29,433)	(67,462)
Net Income	$ 12,400,080	$ 12,906,076	$ 13,629,528
Appropriations to City	923,597	1,508,894	1,796,811
Balance Transferred to Surplus	$ 11,476,483	$ 11,397,182	$ 11,832,717

1/ Includes out-of-state operations of Wisconsin utilities.
2/ Excluding Stock Dividends.

ELECTRIC UTILITY STATISTICS

Comparative statistics of Wisconsin electric utilities for the 3-year period, 1979 to 1981, are summarized in this section. Out-of-state operations are excluded (except in tables 7, 8 and 9 where data on out-of-state sales, purchases and generating plant are presented).

The following tables and charts present the data covering electric utility operations:

Table 4 - Comparative Statement of Revenues and Expenses, 1981-1979
Table 5 - Sales to Ultimate Customers, 1981-1979
Table 6 - Comparative Statement of Operating Expenses, 1981-1979
Table 7 - Summary of Megawatt Hours Sold and Used, 1981-1979
Table 8 - Megawatt Hours Generated and Purchased, 1981-1979
Table 9 - Generating Plant, Substation and Transmission Line Data, 1981-1979
Table 10 - Condensed Summary of 1981 Operations - Individual Private Electric Utilities
Table 11 - Condensed Summary of 1981 Operations - Individual Municipal Electric Utilities
Chart 10 - Residential Revenue and Consumption Ratios, Wisconsin and United States, 1972-1981
Chart 11 - Comparison of Revenues and Expenses, Wisconsin Electric Utilities, 1972-1981
Chart 12 - Revenues from Sales to Ultimate Consumers by Individual Wisconsin Electric Utilities, Percent of Total, 1981

Electric Consumers

The total number of ultimate (retail) electric consumers increased 1.3% over 1980. Residential customers increased 1.1% and rural customers increased 1.5%. Commercial and industrial customers increased 2.1%.

As has already been pointed out, electric cooperatives are not included in the tables. These organizations served an estimated 159,000 customers during 1981. This was 53% of all rural electric customers served in the state.

Revenue and Consumption Ratios

Kilowatt hours sold to ultimate consumers in Wisconsin rose 0.9% during 1981. Commercial and industrial consumption rose 2.0% during the year while residential and rural consumption decreased 0.9% and 0.4% respectively.

State-wide averages by class of service for revenue per megawatt hour are compared below:

	1981	1980	1979
Residential	$54.81	$48.01	$43.65
Commercial and Industrial	44.05	39.12	35.20
Rural	54.79	47.96	44.75
Public St. and Hwy. Lighting	61.44	53.22	48.67
Other Sales to Public Auth.	40.70	36.65	32.88
Interdepartmental Sales	42.79	37.39	34.24
Total Ultimate Consumers	$47.89	$42.35	$38.29

State-wide average ratios of kilowatt hour consumption per customer and revenue per customer are compared below for the three major classes of service:

	1981	1980	1979
Average Annual Use (kWh)			
Residential	6,873	7,014	6,976
Commercial and Industrial	122,567	122,696	125,089
Rural	13,543	13,814	13,711
Average Annual Bill			
Residential	$ 376.73	$ 336.75	$ 304.51
Commercial and Industrial	5,399.35	4,800.35	4,403.73
Rural	742.10	662.56	613.55

Average annual use for residential customers decreased by 2.0%, commercial and industrial decreased by 0.1% and rural decreased by 1.9%. Average annual bills were up by 11.9%, 12.5% and 12.1% respectively for the three classes of service.

Residential revenue and consumption ratios of Wisconsin utilities are compared with national averages over a 10-year period in Chart 10. In 1981, the average Wisconsin residential customer consumed 22.4% fewer kilowatt hours and paid an average bill that was 27.9% less than the national average.

Electric Utility Income Account

A summary of the income account of Wisconsin electric utilities for the past three years is presented in Table 4. A 10-year graphic comparison is made in Chart 11.

Operating revenues continue to rise steadily with 1981 revenues up 12.0% over 1980. Total operating expenses increased 10.6% and net operating revenues were up 20.1%.

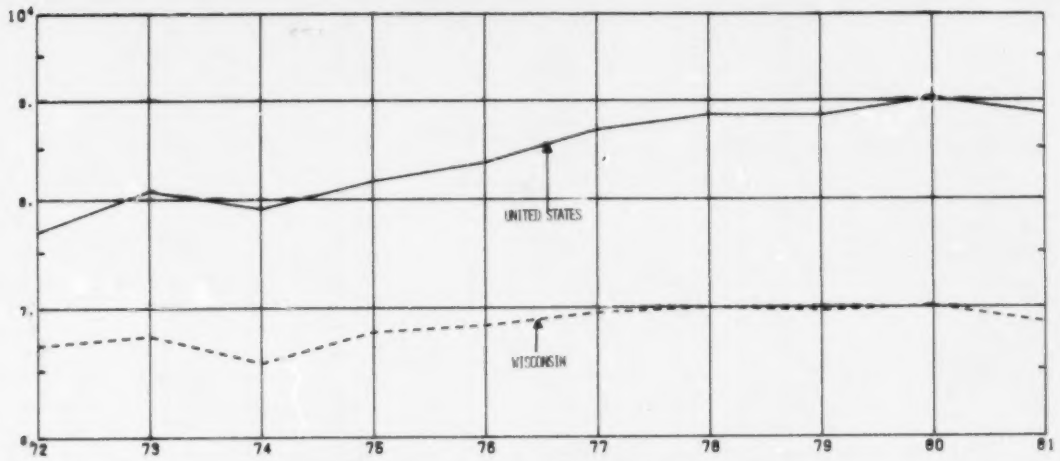
Table 6 presents a detailed analysis of operating expenses, exclusive of depreciation and taxes. Of the classes of expense shown, customer service had the greatest increase which was 24.3%. Sales was least with a 28.0% decrease.

A comparison of certain expense ratios of private and municipal utilities in 1981 is presented below:

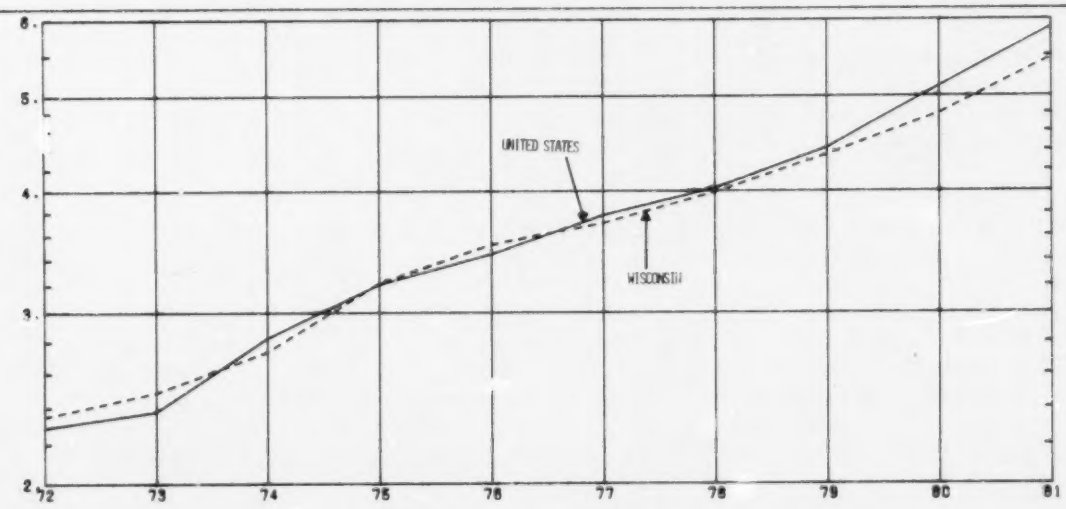
	1981 Expense Ratios					
	Per Dollar of Revenue		Per Average Customer		Per MWh Sold	
	Pvt.	Mun.	Pvt.	Mun.	Pvt.	Mun
Production and Trans.	46.77¢	80.20¢	$504.20	$666.15	$25.70	$33.68
Distribution	4.83	3.64	52.10	30.20	2.66	1.52
Customer Accounts	1.90	1.66	20.47	13.78	1.04	0.70
Customer Services	0.55	0.00	5.90	0.00	0.30	0.00
Sales Promotion 1/	0.02	0.01	0.27	0.06	0.01	0.01
Administrative and General	6.35	5.00	68.38	41.58	3.49	2.10
Total Oper. and Main.	60.42	90.51	651.32	751.77	33.20	38.01
Depreciation	10.73	4.43	115.61	36.78	5.89	1.86
Taxes Other than Income Taxes	4.09	2.81	44.08	23.37	2.25	1.18
Income Taxes	7.33	0.00	79.01	0.00	4.03	0.00
Total Operating Exp.	82.57¢	97.75¢	$890.02	$811.92	$45.37	$41.05

1/ Includes customer service expenses for municipally owned utilities.

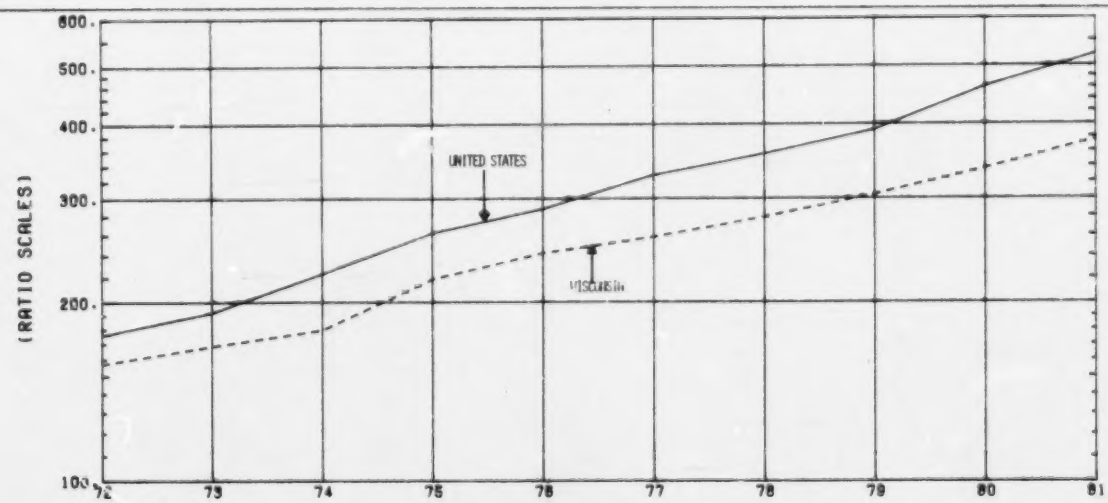
CHART 10
WISCONSIN AND U.S. RESIDENTIAL REVENUE AND CONSUMPTION RATIOS



ANNUAL KILOWATT HOUR SALES PER CUSTOMER

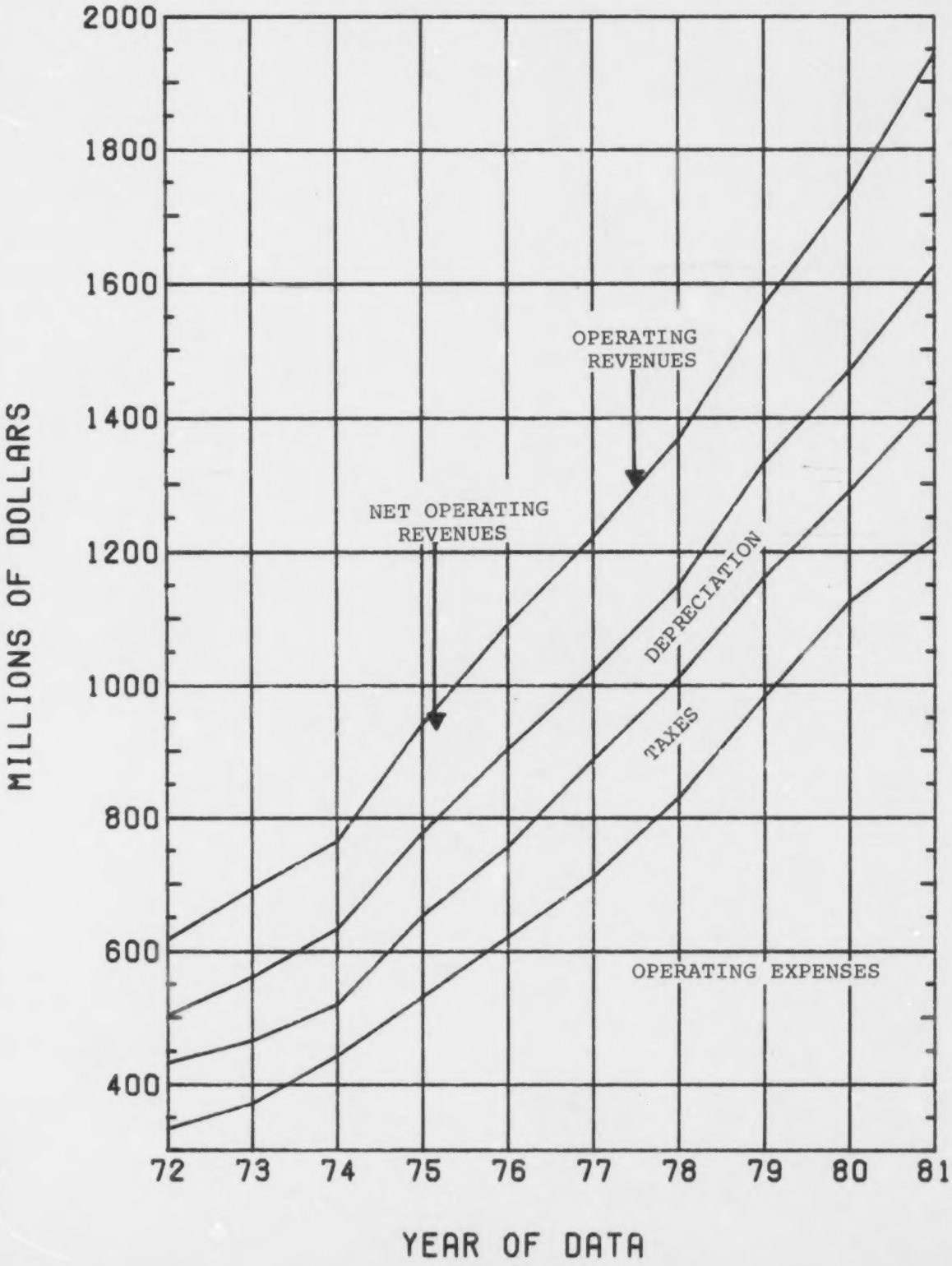


REVENUE PER KILOWATT HOUR



REVENUE PER CUSTOMER

CHART 11
WISCONSIN ELECTRIC UTILITIES REVENUES AND EXPENSES



In addition to the above breakdown of operating expenses, Table 6 presents the detail of production expense on a company-wide basis. If this breakdown is related to corresponding data on generation and purchases, the following comparison of costs per megawatt hour, exclusive of fixed charges, results:

	Production Expense* Per Megawatt Hour Generated or Purchased 1981	
	Private Utilities	Municipal Utilities
Steam Plants-Nuclear Fuel	$ 10.53	$ 0.00
Steam Plants-Fossil Fuel	23.61	55.49
Hydro Electric Plants	5.71	3.90
Internal Combustion (Recip. & Turbine)	32.43	31.64
Purchased Energy	24.07	30.59

*Excludes depreciation, taxes, and return.

Kilowatt Hours Generated and Purchased; Fuel Consumed

The sources of energy of Wisconsin electric utilities are summarized in Table 8. The net generation by plants located in Wisconsin is compared below on a percentage basis over a period of ten years:

	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972
Steam-Nuclear	30.1	28.4%	29.7%	34.3%	33.3%	33.0%	33.4%	27.5%	20.1%	11.3%
Steam-Fossil	64.5	65.9	62.9	58.1	60.8	60.9	59.5	63.8	70.5	80.3
Hydro	4.8	4.6	5.0	5.1	4.2	3.6	4.8	5.0	6.2	6.6
Int. Comb.-Recip.	1/	0.1	0.1	0.2	0.1	0.6	0.2	0.2	0.2	0.2
Int. Comb.-Turbine	0.6	1.0	2.3	2.3	1.6	1.9	2.1	3.5	3.0	1.6
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

During the ten years covered, fossil steam generating plants have produced a major portion of the State's electric energy, varying from a high of 80.3% in 1973 to a low of 58.1% in 1978. Privately owned utilities generated 99.0% of total energy produced by utilities in 1981. The most significant change has been the nuclear plants which generated no energy in 1970 but now produce about 30% of the total.

Fuel consumption ratios over the past five years are presented below:

	1981	1980	1979	1978	1977
BTU's of Fuel Used in Nuclear Steam Plants Per kWh Generated (Net)	10,844	10,825	10,605	10,554	10,491
BTU's of Fuel Used in Fossil Steam Plants Per kWh Generated (Net)	11,070	11,133	11,157	11,271	10,931
BTU's of Fuel Used in Turbine Plants Per kWh Generated (Net)	16,313	15,328	14,493	13,792	14,538
BTU's of Fuel Used in Reciprocating Plants Per kWh Generated (Net)	12,151	12,155	10,727	10,688	9,489

1/ Less than 0.05%.

Generating Plant and Transmission Line Data

Data on the capacity of generating plants and miles of transmission pole line are presented in Table 9. The total capacity of all generating plants operated by Wisconsin utilities as of December 1981 was about 10,000 megawatts of which about 95 megawatts were in plants located outside the State. Of the capacity of plants located in Wisconsin, 15.6% is steam-nuclear, 66.7% is steam-fossil, 3.5% is hydro, 1.1% is by reciprocating engines, and 13.1% is turbine.

About 9,511 miles of transmission line were in service at the close of 1981 of which about 4,300 miles carry voltage in excess of 100,000 volts.

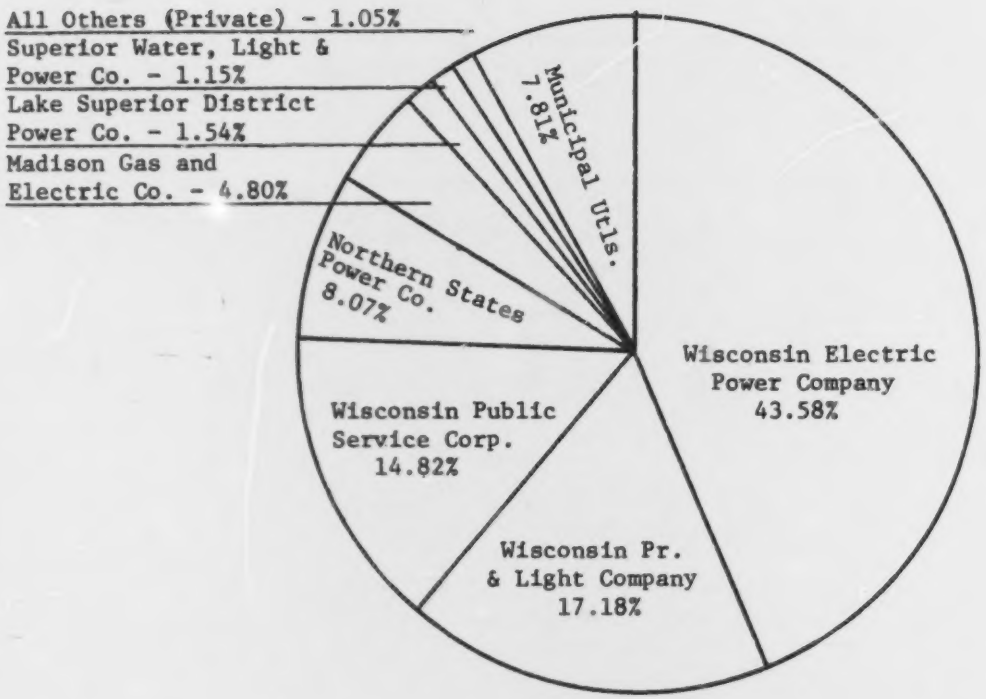
Data on Individual Utilities

Table 10 presents selected operating data covering the year 1981 for each Class A, B, and C private electric utility in the State and Table 11 presents similar data on each Class A, B, and C municipal electric utility. Chart 12 shows the percentage distribution by companies of electric operating revenue from sales to ultimate consumers. Four large private utilities account for 82% of the total. Municipal utilities make up 8%.

Table 10 shows that private utilities as a group generated a large part of their energy requirements while Table 11 shows that municipal utilities purchase most of their requirements. Of the 67 individual municipal utilities listed, only 15 generated some electricity.

CHART 12

Revenues of Wisconsin Electric Utilities
In Percent of Total Sales to Ultimate Consumers
1981


All Others (Private) - 1.05%
Superior Water, Light & Power Co. - 1.15%
Lake Superior District Power Co. - 1.54%
Madison Gas and Electric Co. - 4.80%
Municipal Utls. 7.81%
Northern States Power Co. 8.07%
Wisconsin Electric Power Company 43.58%
Wisconsin Public Service Corp. 14.82%
Wisconsin Pr. & Light Company 17.18%

Consolidated Water Power Co.
Northwestern Wis. Electric Co.
Dahlberg Light & Power Co.
North Central Power Co.
Class C Private
Class D Private
Class D Private

TABLE 4

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1981-1979

	1981	1980	1979
All Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$1,734,305,240	$1,519,683,003	$1,362,669,434
Sales to Other Utilities	153,168,224	155,626,108	147,577,609
Sales to Electric Cooperatives	9,404,232	8,101,511	7,311,706
Miscellaneous Revenues	46,323,290	51,554,755	51,025,707
Total Operating Revenues	$1,943,200,986	$1,734,965,377	$1,568,584,456
Operating Revenue Deductions			
Operation and Maintenance	$1,219,760,574	$1,126,138,161	$ 983,292,255
Depreciation and Amortization	198,863,603	181,291,329	170,807,124
Taxes Other than Income Taxes	77,514,482	63,816,410	64,493,653
Income Taxes	131,315,871	100,877,262	114,459,322
Total Operating Expenses	$1,627,454,530	$1,472,123,162	$1,333,052,354
Net Operating Revenues	$ 315,746,456	$ 262,842,215	$ 235,532,102
Private Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$1,587,090,724	$1,385,499,676	$1,238,903,708
Sales to Other Utilities	150,945,912	153,210,945	145,780,092
Sales to Electric Cooperatives	9,404,232	8,101,511	7,251,252
Miscellaneous Revenues	44,094,138	49,371,050	49,619,735
Total Operating Revenues	$1,791,535,006	$1,596,183,182	$1,441,554,787
Operating Revenue Deductions			
Operation and Maintenance	$1,082,484,754	$1,003,000,330	$ 870,740,128
Depreciation and Amortization	192,146,232	174,908,555	164,945,913
Taxes Other than Income Taxes	73,247,809	60,008,030	60,877,216
Income Taxes	131,315,871	100,877,262	114,459,322
Total Operating Expenses	$1,479,194,666	$1,338,794,177	$1,211,022,579
Net Operating Revenues	$ 312,340,340	$ 257,389,005	$ 230,532,208

(Continued)

TABLE 4 (Concluded)

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1980-1978

Municipal Electric Utilities	1981	1980	1979
Operating Revenues			
Sales to Ultimate Consumers	$ 147,214,516	$ 134,183,327	$ 123,765,726
Sales to Other Electric Utilities	2,222,312	2,415,163	1,797,517
Sales to Electric Cooperatives	0	0	60,454
Miscellaneous Operating Revenues	2,229,152	2,183,705	1,405,972
Total Operating Revenues	$ 151,665,980	$ 138,782,195	$ 127,029,669
Operating Revenue Deductions			
Operation and Maintenance	$ 137,275,820	$ 123,137,831	$ 112,552,127
Depreciation and Amortization	6,717,371	6,382,774	5,861,211
Taxes Other than Income Taxes	4,266,673	3,808,380	3,616,437
Total Operating Expenses	$ 148,259,864	$ 133,328,985	$ 122,029,775
Net Operating Revenues	$ 3,406,116	$ 5,453,210	$ 4,999,894

1/ Excluding out-of-state operations.

TABLE 5

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1981-1979

	1981	1980	1979
All Electric Utilities			
Revenues			
Residential	$ 569,502,284	$ 503,358,192	$ 446,918,206
Commercial and Industrial	1,013,161,036	882,255,845	791,821,576
Rural	104,447,104	91,834,011	84,605,671
Public Street and Highway Lighting	28,779,469	25,670,402	23,253,901
Other Sales to Public Authorities	15,689,763	14,161,938	13,675,573
Interdepartmental Sales	2,725,584	2,402,615	2,394,507
Total Revenue from Ultimate Consumers	$1,734,305,240	$1,519,683,003	$1,362,669,434
Megawatt Hours Sold			
Residential	10,390,298	10,484,099	10,237,699
Commercial and Industrial	22,999,071	22,550,364	22,491,789
Rural	1,906,155	1,914,713	1,890,610
Public Street and Highway Lighting	468,384	482,305	477,823
Other Sales to Public Authorities	385,538	386,392	415,862
Interdepartmental Sales	63,692	64,257	69,925
Total Megawatt Hours Sold to Ultimate Consumers	36,213,138	35,882,130	35,583,708
Average Number of Customers 2/			
Residential	1,511,709	1,494,768	1,467,650
Commercial and Industrial	187,645	183,776	179,807
Rural	140,745	138,605	137,895
Public Street and Highway Lighting	3,347	3,337	3,322
Other Sales to Public Authorities	1,323	1,305	1,268
Interdepartmental Sales	110	110	112
Total Ultimate Consumers	1,844,879	1,821,901	1,790,054

(Continued)

TABLE 5 (Continued)

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1981-1979

	1981	1980	1979
Private Electric Utilities			
Revenues			
Residential	$ 525,658,522	$ 462,453,690	$ 408,823,932
Commercial and Industrial	924,922,106	803,209,200	719,479,731
Rural	95,431,959	83,291,671	76,665,274
Public Street and Highway Lighting	25,678,743	22,746,541	20,555,130
Other Sales to Public Authorities	14,366,400	12,931,357	12,566,214
Interdepartmental Sales	1,032,994	867,217	813,427
Total Revenue from Ultimate Consumers	$1,587,090,724	$1,385,499,676	$1,238,903,708
Megawatt Hours Sold			
Residential	9,331,423	9,426,243	9,198,672
Commercial and Industrial	20,770,999	20,382,828	20,340,233
Rural	1,702,797	1,714,555	1,694,270
Public Street and Highway Lighting	417,663	432,055	432,115
Other Sales to Public Authorities	355,635	356,589	387,354
Interdepartmental Sales	23,238	23,073	25,659
Total Megawatt Hours Sold to Ultimate Consumers	32,601,755	32,335,343	32,078,303
Average Number of Customers 2/			
Residential	1,369,524	1,354,494	1,329,747
Commercial and Industrial	164,024	160,846	157,076
Rural	124,133	122,215	121,666
Public Street and Highway Lighting	3,209	3,200	3,179
Other Sales to Public Authorities	1,071	1,053	1,041
Interdepartmental Sales	9	9	9
Total Ultimate Consumers	1,661,970	1,641,817	1,612,718

(Continued)

TABLE 5 (Concluded)

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1981-1979

	1981	1980	1979
Municipal Electric Utilities			
Revenues			
Residential	$ 43,843,762	$ 40,904,502	$ 38,094,274
Commercial and Industrial	88,238,930	79,046,645	72,341,845
Rural	9,015,145	8,542,340	7,940,397
Public Street and Highway Lighting	3,100,726	2,923,861	2,698,771
Other Sales to Public Authorities	1,323,363	1,230,581	1,109,359
Interdepartmental Sales	1,692,590	1,535,398	1,581,080
Total Revenue from Ultimate Consumers	$ 147,214,516	$ 134,183,327	$ 123,765,726
Megawatt Hours Sold			
Residential	1,058,875	1,057,856	1,039,027
Commercial and Industrial	2,228,072	2,167,536	2,151,556
Rural	203,358	200,158	196,340
Public Street and Highway Lighting	50,721	50,250	45,708
Other Sales to Public Authorities	29,903	29,803	28,508
Interdepartmental Sales	40,454	41,184	44,266
Total Megawatt Hours Sold to Ultimate Consumers	3,611,383	3,546,787	3,505,405
Average Number of Customers 2/			
Residential	142,185	140,274	137,903
Commercial and Industrial	23,621	22,930	22,731
Rural	16,612	16,390	16,229
Public Street and Highway Lighting	138	137	143
Other Sales to Public Authorities	252	252	227
Interdepartmental Sales	101	101	103
Total Ultimate Consumers	182,909	180,084	177,336

1/ Excluding out-of-state operations.
2/ Heating, cooking and yard lighting customers on separate rates are not included in customer data, as they would be duplications.

TABLE 6

COMPARATIVE STATEMENT OF OPERATION AND MAINTENANCE EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1981-1979

	1981	1980	1979
All Electric Utilities			
Production Expense-Total Company			
Steam-Nuclear Fuel	$ 106,425,181	$ 82,930,791	$ 61,672,565
Steam-Fossil Fuel	517,099,082	480,924,384	413,850,753
Hydraulic	11,982,217	10,656,983	9,722,879
Int. Comb.-Recip. and Turbine	12,371,225	23,177,591	35,325,213
Purchases or Net Interchanges	296,832,284	291,135,695	258,049,320
Other Power Supply	13,108,977	7,258,511	2,344,003
Total Production Expense	$ 957,818,966	$ 896,083,955	$ 780,964,733
Amount Applicable to Out-of-State Sales	14,281,925	17,873,548	16,160,558
Amount Applicable to Wisconsin Sales	$ 943,537,041	$ 878,210,407	$ 764,804,175
Operation and Maintenance - Wisconsin Only			
Production	$ 943,537,041	$ 878,210,407	$ 764,804,175
Transmission 2/	16,075,414	15,480,835	14,275,263
Distribution 2/	92,104,748	87,035,383	75,795,753
Customer Accounts	36,542,110	31,650,169	27,437,016
Sales Promotion 3/	446,970	621,221	1,237,445
Customer Service	9,811,715	7,894,759	5,311,787
Administrative and General	121,242,577	105,245,387	94,430,816
Total	$1,219,760,575	$1,126,138,161	$ 983,292,255
Private Electric Utilities			
Production Expense - Total Company			
Steam-Nuclear Fuel	$ 106,425,181	$ 82,930,791	$ 61,672,565
Steam-Fossil Fuel	506,393,176	470,604,150	403,855,661
Hydraulic	11,527,653	10,189,030	9,284,058
Int. Comb.-Recip. and Turbine	11,465,277	21,349,972	33,214,791
Purchases or Net Interchanges	187,432,551	194,592,507	170,402,602
Other Power Supply	13,071,820	7,258,453	2,341,322
Total Production Expense	$ 836,315,658	$ 786,924,903	$ 680,770,999
Amount Applicable to Out-of-State Sales	14,281,925	17,873,548	16,160,558
Amount Applicable to Wisconsin Sales	$ 822,033,733	$ 769,051,355	$ 664,610,441
Operation and Maintenance - Wisconsin Only			
Production	$ 822,033,733	$ 769,051,355	$ 664,610,441
Transmission 2/	15,937,901	15,419,685	14,211,073
Distribution 2/	86,589,294	82,006,471	71,472,934
Customer Accounts	34,025,437	29,468,418	25,454,135
Sales Promotion	439,178	615,386	1,221,730
Customer Service	9,808,885	7,892,268	5,311,787
Administrative and General	113,650,326	98,546,747	88,458,028
Total	$1,082,484,754	$1,003,000,330	$ 870,740,128

TABLE 6 (Concluded)

COMPARATIVE STATEMENT OF OPERATION AND MAINTENANCE EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1981-1979

	1981	1980	1979
Municipal Electric Utilities			
Production Expense			
Steam-Fossil Fuel	$ 10,705,906	$ 10,320,234	$ 9,995,092
Hydraulic	454,564	467,953	438,821
Int. Com.-Recip. and Turbine	905,948	1,827,619	2,110,422
Purchases or Net Interchanges	109,399,733	96,543,188	87,646,718
Other Power Supply	37,157	58	2,681
Total Production Expense	$ 121,503,308	$ 109,159,052	$ 100,193,734
Transmission 2/	137,512	61,150	64,190
Distribution 2/	5,515,454	5,028,912	4,322,819
Customer Accounts	2,516,673	2,181,751	1,982,881
Sales 3/	10,622	8,326	15,715
Administrative and General	7,592,251	6,698,640	5,972,788
Total	$ 137,275,820	$ 123,137,831	$ 112,552,127

1/ Out-of-state operations of Wisconsin Utilities are not included except in detail of production expenses, as indicated.
2/ Transmission and distribution expenses are combined in the Class D report forms. These utilities are assumed to have no transmission expense.
3/ Includes customer service expense of municipal utilities.

TABLE 7

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1981-1979

All Electric Utilities	1981	1980	1979
MWh Sold to Ultimate Customers (Wisconsin Only)	36,213,138	35,884,078	35,583,708
MWh Sold to Other Electric Utilities and Cooperatives			
Wisconsin Electric Utilities	4,895,684	5,012,209	4,866,363
Electric Cooperatives	307,764	296,699	298,698
Total Sold to Other Electric Utilities and Cooperatives	5,203,448	5,308,908	5,165,061
MWh Used by Utilities 1/	119,234	37,630	101,036
Total MWh Sold or Used in Wisconsin	41,535,820	41,228,668	40,849,805
MWh Used by Utilities Out-of-State	2,456	829	7,021
MWh Sold Outside Wisconsin by Wisconsin Utilities 2/	843,293	1,527,971	1,434,005
Total MWh Sold or Used	42,381,569	42,757,468	42,290,831
MWh Unaccounted for	3,078,717	3,008,539	2,965,703
Total MWh Generated and Purchased	45,460,286	45,766,007	45,256,534

(Continued)

TABLE 7 (Continued)

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1981-1979

	1981	1980	1979
Private Electric Utilities			
MWh Sold to Ultimate Customers (Wisconsin Only)	32,601,755	32,335,343	32,078,303
MWh Sold to Other Electric Utilities and Cooperatives			
Wisconsin Electric Utilities	4,831,236	4,928,841	4,789,335
Electric Cooperatives	307,764	296,699	298,336
Total Sold to Other Electric Utilities and Cooperatives	5,139,000	5,225,540	5,087,671
MWh Used by Utilities 1/	115,868	33,750	96,632
Total MWh Sold or Used in Wisconsin	37,856,623	37,594,633	37,262,606
MWh Used by Utilities Out-of-State	2,456	829	7,021
Total MWh Sold Outside Wisconsin by Wisconsin Utilities 2/	843,293	1,527,971	1,434,005
Total MWh Sold or Used	38,702,372	39,123,433	38,703,632
MWh Unaccounted for	2,843,818	2,806,894	2,754,744
Total MWh Generated and Purchased	41,546,190	41,930,327	41,458,376

(Continued)

TABLE 7 (Concluded)

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1981-1979

	1981	1980	1979
Municipal Electric Utilities			
MWh Sold to Ultimate Customers	3,611,383	3,546,787	3,505,405
MWh Sold to Other Electric Utilities and Cooperatives			
Wisconsin Electric Utilities	64,448	83,368	77,028
Electric Cooperatives	0	0	362
Total Sold to Other Electric Utilities and Cooperatives	64,448	83,368	77,390
MWh Used by Utilities 1/	3,366	3,880	4,404
Total MWh Sold or Used	3,679,197	3,634,035	3,587,199
MWh Unaccounted for	234,899	201,645	210,959
Total MWh Generated and Purchased	3,914,096	3,835,680	3,798,158

1/ Excluding interdepartmental sales.
2/ Includes sales to out-of-state utilities delivered in Wisconsin and at the state line.
3/ Out-of-state use was not tabulated separately prior to 1979.

TABLE 8

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1981-1979

	1981	1980	1979
All Electric Utilities			
Net Generation in Wisconsin			
Steam - Nuclear Fuel	10,103,260	9,697,654	10,202,173
Steam - Fossil Fuel	21,640,465	22,506,544	21,579,086
Hydraulic	1,609,754	1,561,421	1,713,111
Internal Combustion - Recip.	4,386	33,105	43,068
Internal Combustion - Turbine	189,575	354,647	784,632
Total	33,547,440	34,153,371	34,322,070
Net Generation Outside Wisconsin by Wisconsin Companies			
Hydraulic	525,720	488,905	554,386
Internal Combustion - Recip.	(56)	8	84
Total	525,664	488,913	554,470
Total Megawatt Hours Generated			
Steam - Nuclear Fuel	10,103,260	9,697,654	10,202,173
Steam - Fossil Fuel	21,640,465	22,506,544	21,579,086
Hydraulic	2,135,474	2,050,326	2,267,497
Internal Combustion - Recip.	4,330	33,113	43,152
Internal Combustion - Turbine	189,575	354,647	784,632
Total	34,073,104	34,642,284	34,876,540
Megawatt Hours Purchased Plus Net Interchanges			
From Wisconsin Electric Utilities	4,631,267	6,732,947	5,497,845
From Out-of-State Elec. Utils. 1/	4,291,798	3,946,398	4,353,240
From Electric Cooperatives	2,229,439	387,429	275,304
From Other Non-Utility Companies	210,833	186,339	253,605
Total	11,363,337	11,253,113	10,379,994
Total Megawatt Hours Generated and Purchased	45,436,441	45,895,397	45,256,534
Tons of Coal Used in Steam Plants	11,205,502	11,538,407	10,683,831
Gallons of Fuel Oil Used in Steam Plants	12,909,876	22,423,590	21,754,802
Therms of Natural Gas Used in Steam Plants	49,681,037	98,667,731	139,122,297
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	156,665	591,346	1,007,308
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	289,605	1,469,001	312,074
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plts.	2,245,992	9,866,050	31,068,317
Therms of Natural Gas Used in Internal Combustion-Turbine Plts.	26,718,116	40,882,598	70,055,963

TABLE 8 (Continued)

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1981-1979

	1981	1980	1979
Private Electric Utilities			
Net Generation in Wisconsin			
Steam - Nuclear Fuel	10,103,260	9,697,654	10,202,173
Steam - Fossil Fuel	21,447,545	22,297,994	21,323,805
Hydraulic	1,493,182	1,449,044	1,598,122
Internal Combustion - Recip.	375	1,211	2,724
Internal Combustion - Turbine	188,794	352,289	777,626
Total	33,233,156	33,798,192	33,904,450
Net Generation Outside Wisconsin by Wisconsin Companies			
Hydraulic	525,720	488,905	554,386
Internal Combustion - Recip.	(56)	8	84
Total	525,664	488,913	554,470
Total Megawatt Hours Generated			
Steam - Nuclear Fuel	10,103,260	9,697,654	10,202,173
Steam - Fossil Fuel	21,447,545	22,297,994	21,323,805
Hydraulic	2,018,902	1,937,949	2,152,508
Internal Combustion - Recip.	319	1,219	2,808
Internal Combustion - Turbine	188,794	352,289	777,626
Total	33,758,820	34,287,105	34,458,920
Megawatt Hours Purchased Plus Net Interchanges			
From Wisconsin Electric Utilities	1,636,908	3,453,954	2,305,695
From Out-of-State Elec. Utils. 1/	4,291,798	3,946,398	4,353,240
From Electric Cooperatives	1,651,087	190,337	89,536
From Other Non-Utility Companies	207,577	181,923	250,985
Total	7,787,370	7,772,612	6,999,456
Total Megawatt Hours Generated and Purchased	41,546,190	42,059,717	41,458,376
Tons of Coal Used in Steam Plants	11,367,743	11,380,644	10,512,428
Gallons of Fuel Oil Used in Steam Plants	12,909,876	22,423,590	21,728,910
Therms of Natural Gas Used in Steam Plants	49,681,037	98,667,731	139,122,297
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	39,047	112,518	73,416
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	0	0	175,140
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plts.	2,245,992	9,861,726	31,006,214
Therms of Natural Gas Used in Internal Combustion-Turbine Plts.	26,566,706	40,461,798	70,055,963

TABLE 8 (Concluded)

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1981-1979

	1981	1980	1979
Municipal Electric Utilities			
Net Generation in Wisconsin			
Steam - Fossil Fuel	192,920	208,550	255,281
Hydraulic	116,572	112,377	114,989
Internal Combustion - Recip.	4,011	31,894	40,344
Internal Combustion - Turbine	781	2,358	7,006
Total	314,284	355,179	417,620
Megawatt Hours Purchased			
From Wisconsin Electric Utilities	2,994,359	3,278,993	3,192,150
From Electric Cooperatives	578,352	197,092	185,768
From Other Non-Utility Companies	3,256	4,416	2,620
Total	3,575,967	3,480,501	3,380,538
Total Megawatt Hours Generated and Purchased	3,890,251	3,835,680	3,798,158
Tons of Coal Used in Steam Plants	134,462	157,763	171,810
Gallons of Fuel Oil Used in Steam Plants	0	0	25,892
Therms of Natural Gas Used in Steam Plants	0	0	0
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	117,618	478,828	933,892
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	289,605	1,469,001	2,863,636
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plants	0	4,324	62,103
Therms of Natural Gas Used in Internal Combustion-Turbine Plants	150,900	420,800	0

1/ Includes purchases delivered in Wisconsin or at state line.

TABLE 9

GENERATING PLANT AND TRANSMISSION LINE DATA
WISCONSIN ELECTRIC UTILITIES
1981-1979

	1981	1980	1979
Capacity of Generators in Kilowatts			
All Plants in Wisconsin			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	6,572,092	6,250,666	5,720,654
Hydraulic	349,195	349,570	349,170
Internal Combustion - Recip.	102,634	102,471	102,904
Internal Combustion - Turbine	1,286,450	1,279,700	1,279,700
Total	9,851,053	9,523,089	8,993,110
Private Utility Plants in Wisconsin			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	6,420,662	6,096,736	5,566,724
Hydraulic	330,450	330,825	330,425
Internal Combustion-Recip.	34,596	34,471	34,721
Internal Combustion-Turbine	1,266,450	1,259,700	1,259,700
Total	9,592,840	9,262,414	8,732,252
Municipal Utility Plants in Wisconsin			
Steam - Fossil Fuel	151,430	153,930	153,930
Hydraulic	18,745	18,745	18,745
Internal Combustion-Recip.	68,038	68,000	68,183
Internal Combustion-Turbine	20,000	20,000	20,000
Total	258,213	260,675	260,858
Plants Located Outside Wisconsin Operated by Wisconsin Utils. 1/			
Hydraulic	90,699	90,699	90,699
Internal Combustion-Recip.	5,042	5,042	5,042
Total	95,741	95,741	95,741
Total Plants Operated by Wisconsin Utilities			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	6,572,092	6,250,666	5,720,654
Hydraulic	439,894	440,269	439,869
Internal Combustion-Recip.	107,676	107,513	107,946
Internal Combustion-Turbine	1,286,450	1,279,700	1,279,700
Total	9,946,794	9,618,830	9,088,851
Miles of Transmission Pole or Tower (Including Out-of-State)			
Over 100,000 Volts	4,319	4,281	4,138
Less than 100,000 Volts	5,192	5,091	5,127

1/ Out-of-State plants are all owned by private electric utilities.

TABLE 10

CONDENSED SUMMARY OF 1981 OPERATIONS
INDIVIDUAL PRIVATE ELECTRIC UTILITIES 1/

Utilities	Operating Revenues 2/	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Net Operating Revenue	Total MWh Sold 2/	Average Number of Consumers 3/	M.h Generated 4/	MWh Purchased 4/
Class A, B, and C										
Consolidated Water Power Co.	$ 9,809,997	$ 9,434,998	$ 328,773	$ 121,784	$ (19,539)	$ (56,019)	474,088	969	144,181	339,082
Dahlberg Light & Power Co.	3,382,370	2,472,468	192,969	96,735	248,341	371,857	50,449	7,701	2,074	55,595
Lake Superior District Power Co.	29,960,331	20,789,683	2,817,887	1,045,472	1,818,429	3,488,860	575,798	30,545	383,445	390,277
Madison Gas and Electric Co.	93,292,100	52,710,618	11,232,482	4,035,743	7,935,777	17,377,480	1,963,018	96,621	1,966,491	86,094
North Central Power Co.	966,811	623,270	64,474	48,723	31,887	198,457	17,528	2,913	11,918	7,986
Northern States Power Co.	156,756,952	108,062,795	14,176,350	4,147,934	12,705,621	17,664,252	3,151,428	138,288	732,032	2,864,027
Northwestern Wisconsin Electric Co.	4,829,679	3,649,811	328,916	153,997	99,104	597,851	87,103	8,689	10,797	87,215
Pioneer Power & Light Co.	698,324	600,003	38,352	15,931	8,736	35,302	14,684	1,278	144	15,158
Superior Water, Light & Power Co.	22,409,158	19,746,457	617,410	319,386	415,082	1,310,823	476,392	12,559	11,548	506,160
Wisconsin Electric Power Co.	846,812,817	501,325,160	95,972,150	37,046,718	54,376,735	158,092,054	17,179,191	788,110	17,438,678	1,462,791
Wisconsin Power and Light Co.	333,802,523	187,910,350	33,422,826	13,553,073	35,606,837	63,309,437	7,112,620	297,790	6,807,085	895,113
Wisconsin Public Service Corp.	288,069,356	174,507,539	32,910,184	12,647,800	18,085,691	49,918,142	6,624,026	275,031	6,250,427	1,062,178
Cross Plains Elec. Co. 5/	396,138	336,979	22,665	9,209	2,801	24,484	7,394	1,043	0	8,033
Subtotal	$1,791,186,556	$1,082,170,131	$192,125,438	$73,242,505	$131,315,502	$312,332,980	37,733,719	1,661,537	33,758,820	7,779,709
Class D										
Westfield Milling & Electric Co.	348,450	314,623	20,794	5,304	369	7,360	7,036	536	0	7,661
Grand Total	$1,791,535,006	$1,082,484,754	$192,146,232	$73,247,809	$131,315,871	$312,340,340	37,740,755	1,662,073	33,758,820	7,787,370

1/ Data included in this table includes Wisconsin operations only, except where noted.
2/ Includes Interdepartmental Sales and Sales for Resale.
3/ Excluding Off-Peak Water Heating and Area Lighting Customers.
4/ Total company operations are represented in data on generation and purchases. Companies operating outside Wisconsin are: Lake Superior District Power Co., Northwestern Wisconsin Electric Co., Wisconsin Electric Power Co., and Wisconsin Public Service Corp. Where power is interchanged, the net figure is added to purchase.
5/ Sold to Madison Gas & Electric Co. on 6-30-81.

TABLE 11

CONDENSED SUMMARY OF 1981 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	Total MWh Sold 1/	Average Number of Customers 2/	MWh Generated	MWh Purchased
Class A, B, and C									
Algoma	$ 1,197,734	$ 1,094,590	$ 30,048	$ 28,026	$ 45,070	29,113	1,772	0	29,659
Arcadia	1,023,550	864,995	83,874	50,257	24,424	25,492	1,145	324	24,504
Bangor	1,018,059	905,534	46,734	28,126	37,665	24,692	1,151	0	26,995
Barron	1,030,405	833,644	87,937	44,611	64,213	23,329	1,330	481	24,335
Black Earth	475,952	410,739	23,488	18,824	22,901	9,231	842	0	9,841
Black River Falls	1,251,521	1,063,006	71,151	55,482	61,882	34,288	2,167	4,955	32,152
Bloomer	1,091,531	1,021,825	31,973	18,933	18,800	29,069	1,441	0	30,475
Boscobel	954,373	890,184	41,356	26,057	(3,224)	22,208	1,436	0	23,304
Brodhead	827,575	771,861	26,996	20,168	8,550	19,345	1,493	0	21,003
Cedarburg	3,485,359	3,099,075	136,954	109,958	139,372	74,868	4,207	2,702	75,539
Clintonville	1,660,276	1,610,867	44,103	33,052	(27,746)	38,099	2,416	0	40,696
Columbus	1,406,132	1,272,613	47,165	36,677	49,677	31,608	1,914	0	34,406
Cornell	360,312	344,762	17,359	11,091	(12,900)	8,825	743	0	9,784
Cuba City	513,196	490,973	25,644	15,681	(19,102)	11,440	876	0	12.893
Cumberland	1,305,078	858,366	170,928	90,497	185,287	18,771	1,098	242	20,568
Deerfield	408,327	360,926	21,357	13,513	12,531	8,013	611	0	8,618
Eagle River	760,867	699,984	27,817	17,765	15,301	18,471	996	0	20,042
Elkhorn	1,889,594	1,822,479	76,552	46,175	(55,612)	46,601	2,314	0	49,849
Elroy	445,316	398,347	39,516	18,400	(10,947)	11,647	782	(192)	12,264
Evansville	1,592,572	1,438,717	47,505	29,467	76,883	35,400	2,111	0	37,520
Fennimore	804,486	741,806	42,611	23,063	(2,994)	17,524	1,157	18	18,815
Hartford	2,485,948	2,227,811	54,300	51,114	152,723	53,291	2,892	0	56,962
Hustisford	544,177	463,761	40,659	20,610	19,147	10,976	1,090	0	11,921
Jefferson	3,290,096	3,173,546	61,524	43,761	11,265	84,146	2,766	0	86,362
Juneau	937,830	832,650	45,007	28,063	32,110	22,182	792	0	23,184
Kaukauna	15,100,323	14,283,373	583,353	360,399	(126,802)	507,403	8,305	106,701	421,513
Kiel	1,350,119	1,248,385	53,100	30,940	17,694	28,912	1,373	0	32,445
Lake Mills	1,824,354	1,744,585	70,989	33,925	(25,145)	41,910	2,482	0	44,784
Lodi	525,480	475,761	21,453	12,416	15,850	11,824	961	0	12,598
Manitowoc	11,151,667	10,330,513	544,244	356,762	(79,852)	264,805	14,239	54,248	225,756
Marshfield	8,920,750	8,003,738	418,633	328,981	169,398	208,245	9,294	70,849	147,229
Medford	2,263,292	2,155,842	71,300	43,227	(7,077)	53,652	2,387	0	56,384
Menasha	5,465,357	4,924,205	385,345	267,038	(111,231)	113,338	6,359	42,188	75,185
Mount Horeb	1,207,372	1,046,412	72,102	33,634	55,224	27,281	1,656	0	29,225
Muscoda	638,104	548,554	35,469	19,788	34,293	11,327	854	0	13,374

TABLE 11 (Concluded)

CONDENSED SUMMARY OF 1981 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	Total MWh Sold 1/	Average Number of Customers 2/	MWh Generated	MWh Purchased
New Glarus	504,942	470,224	14,536	9,729	10,453	11,984	828	0	12,859
New Holstein	1,893,910	1,712,230	68,377	37,236	76,067	43,352	1,923	0	45,696
New Lisbon	521,962	402,542	51,140	26,724	41,556	10,077	695	314	10,338
New London	4,702,039	4,262,245	75,057	64,338	300,399	117,128	2,866	0	120,612
New Richmond	1,330,130	1,227,917	48,574	32,088	21,551	35,508	1,988	0	37,327
Oconomowoc	4,437,223	4,042,583	170,516	130,361	93,763	106,223	5,307	0	112,397
Oconto Falls	694,931	614,867	27,451	17,800	34,813	15,226	1,163	0	15,964
Pardeeville	442,292	420,579	16,392	8,663	(3,342)	10,465	892	89	11,225
Plymouth	4,271,498	3,754,154	195,001	114,531	207,812	97,741	5,024	0	105,360
Prairie Du Sac	535,665	484,077	30,379	16,826	4,383	10,765	966	0	11,731
Princeton	392,004	379,012	16,705	8,319	(12,032)	8,732	798	0	9,524
Reedsburg	2,735,131	2,524,867	55,715	41,662	112,887	71,434	2,609	0	73,994
Rice Lake	3,182,867	2,815,911	158,308	91,215	117,433	77,930	3,822	0	87,091
Richland Center	3,260,553	2,840,845	170,928	108,320	140,460	59,838	2,710	25,635	36,887
River Falls	2,583,979	1,989,024	193,498	115,370	286,087	56,456	3,758	1,991	57,219
Sauk City	907,762	832,781	31,769	18,818	24,394	19,814	1,239	0	21,451
Shawano	4,566,084	4,368,050	137,323	99,951	(39,240)	118,801	4,015	0	123,711
Sheboygan Falls	3,143,287	2,902,793	97,988	45,770	96,736	82,399	2,691	0	86,292
Shullsburg	348,637	315,946	15,974	10,767	5,950	7,399	680	0	7,835
Slinger	482,537	445,674	17,597	8,949	10,317	10,554	721	0	11,813
Spooner	739,940	632,286	20,166	12,696	74,792	17,133	1,388	0	18,382
Stoughton	2,995,937	2,641,039	120,322	69,844	164,732	67,593	5,215	0	72,788
Sturgeon Bay	4,380,362	3,603,982	352,721	141,847	281,812	96,463	5,915	0	105,283
Sun Prairie	3,189,162	2,891,667	142,551	84,963	69,981	75,800	4,937	0	81,072
Two Rivers	2,848,391	2,472,046	113,995	73,243	189,107	66,585	5,660	0	71,736
Waterloo	1,240,688	1,189,018	25,646	18,742	7,282	29,311	1,233	0	31,944
Waunakee	1,235,864	1,147,667	51,367	25,904	10,926	27,646	1,615	0	31,596
Waupun	2,148,791	1,972,887	81,796	42,184	51,924	51,598	3,180	0	54,026
Westby	504,840	463,881	23,244	11,966	5,749	12,996	866	0	14,074
Whitehall	532,325	516,063	22,377	15,807	(21,922)	13,480	829	0	14,256
Wisconsin Dells	1,159,662	1,038,665	55,407	35,381	30,209	24,478	1,550	0	26,676
Wisconsin Rapids	6,497,350	5,809,056	278,026	236,019	174,249	154,401	10,152	0	163,931
Subtotal	$147,617,829	$133,639,007	$6,479,392	$4,142,514	$3,356,916	3,586,636	174,687	310,545	3,485,274
Class D 18 Utilities	4,048,150	3,636,814	237,979	124,159	49,198	89,195	8,868	4,062	92,240
Grand Total	$151,665,979	$137,275,821	$6,717,371	$4,266,673	$3,406,114	3,675,831	183,555	314,607	3,577,514

1/ Includes Interdepartmental Sales and Sales for Resale.
2/ Excluded Off-Peak Water Heating and Area Lighting Customers.

GAS UTILITY SUMMARY

Comparative statistics of the gas utility industry in Wisconsin for the three year period 1981-1979 are presented in this section. The following tables and charts deal with gas utility operations:

Table 12 - Comparative Statement of Revenues and Expenses, 1981-1979
Table 13 - Sales to Ultimate Consumers by Classes, 1981-1979.
Table 14 - Operating and Plant Statistics, 1981-1979.
Table 15 - Condensed Summary of 1981 Operations - Individual Utilities.

Chart 13 - Comparison of Revenues and Expenses, Wisconsin Gas Utilities, 1972-1981.
Chart 14 - Residential Revenue and Consumption Ratios, Wisconsin Gas Utilities, 1972-1981.
Chart 15 - Revenue of Individual Gas Utilities, Percent of Total Sales to Ultimate Consumers, 1981.

Gas Utility Revenues and Expenses

Table 12 and Chart 13 show that gas utility revenues in 1981 were up about 13.9% from the previous year. Expense rose 14.6% during the same period. Therms sold to ultimate consumers decreased 7.1% while the number of ultimate (retail) consumers increased 1.9%.

Sales to Ultimate Consumers

Table 13 summarizes sales to ultimate consumers. Percentage changes in 1981 by principle classes of service are given below:

	% Change From 1980 to 1981		
	Revenues	Therms Sold	Number of Customers
Residential - General	3.61%	(19.04)%	(9.24)%
Residential - Space Heating	12.74	(8.98)	3.33
Commercial and Industrial - Firm	10.33	(10.21)	(9.62)
Commercial and Industrial - Interr.	21.77	0.32	35.87
Commercial and Industrial - Sp. Htg.	11.36	(9.17)	5.45
Total Sales to Ultimate Consumers	13.78%	(7.08)%	1.95%

The number of residential space heating customers rose 3.33% during 1981. Since many of these customers formerly took service as residential general customers, a decline occurred in the number served in that classification. Commercial and industrial space heating customers rose while there was a decline in firm customers. Overall the number of commercial and industrial customers was up about 4%.

The decline in therms sold to residential-general consumers was due to the reduction in customers.

CHART 13
WISCONSIN GAS UTILITIES REVENUES AND EXPENSES

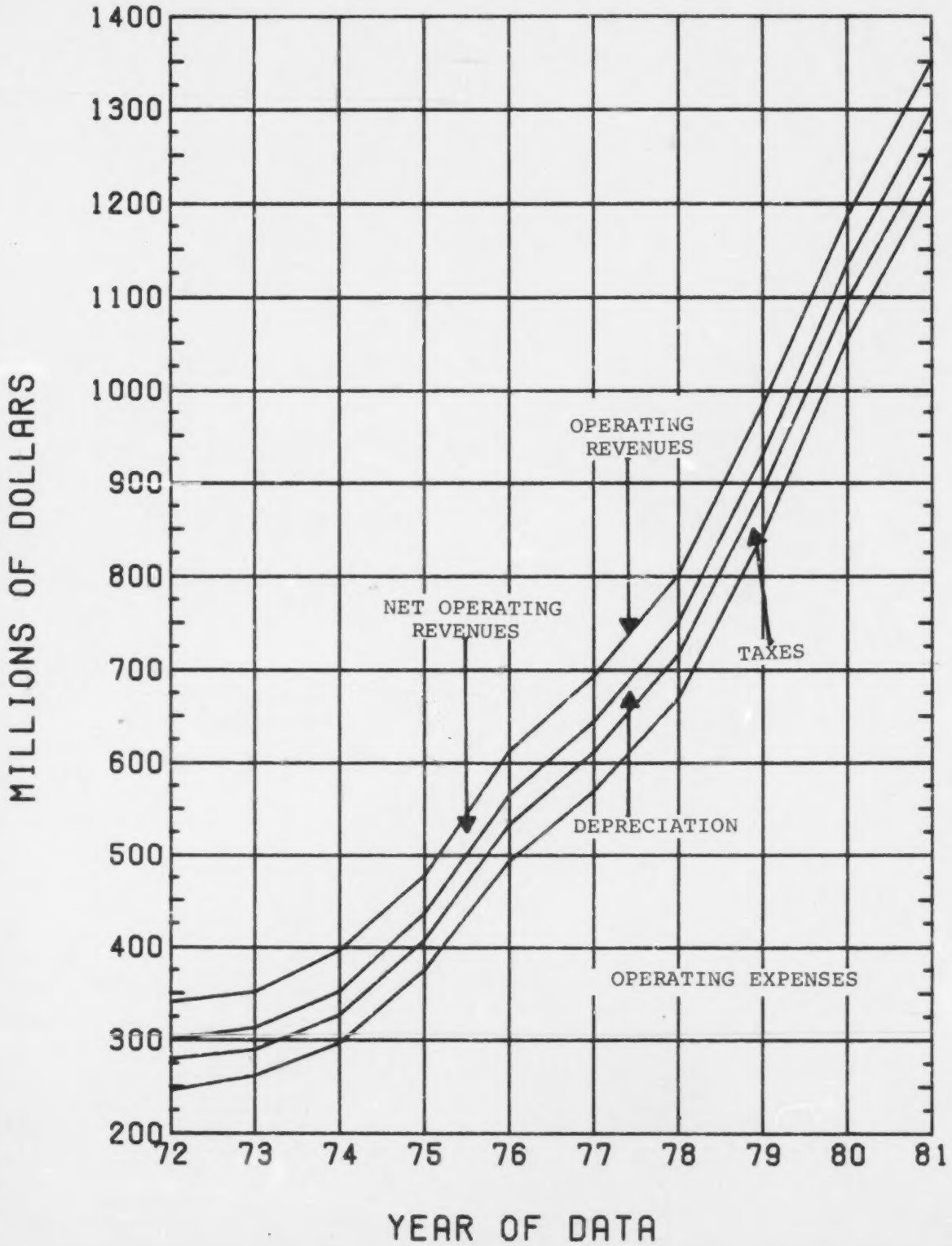
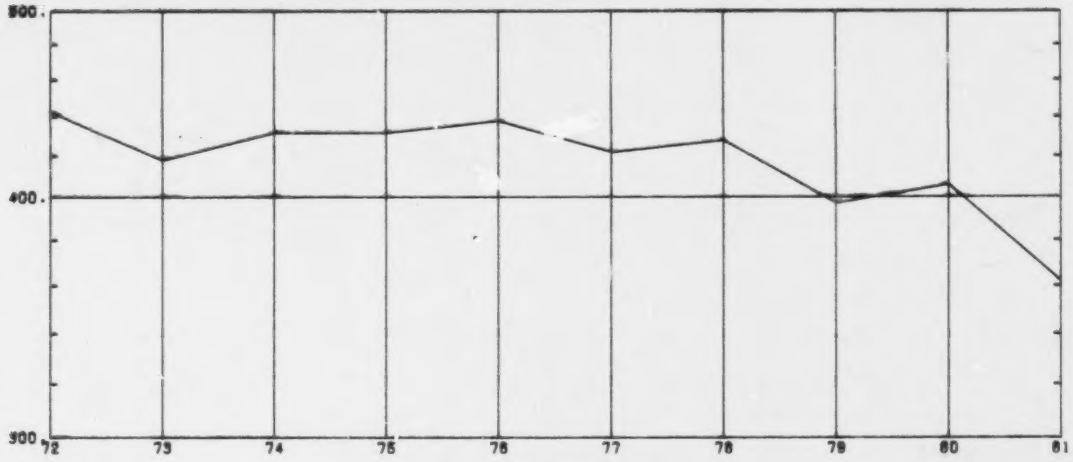
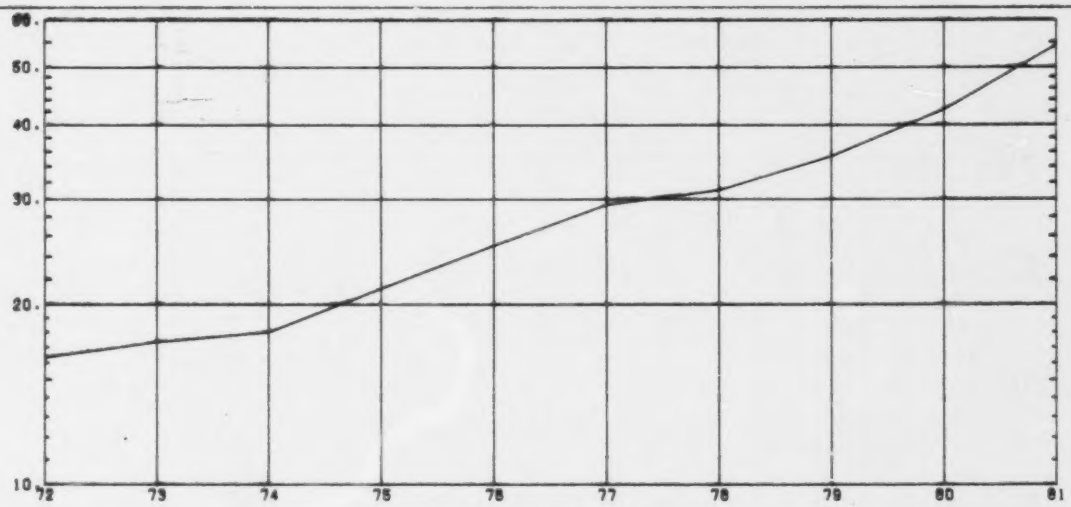


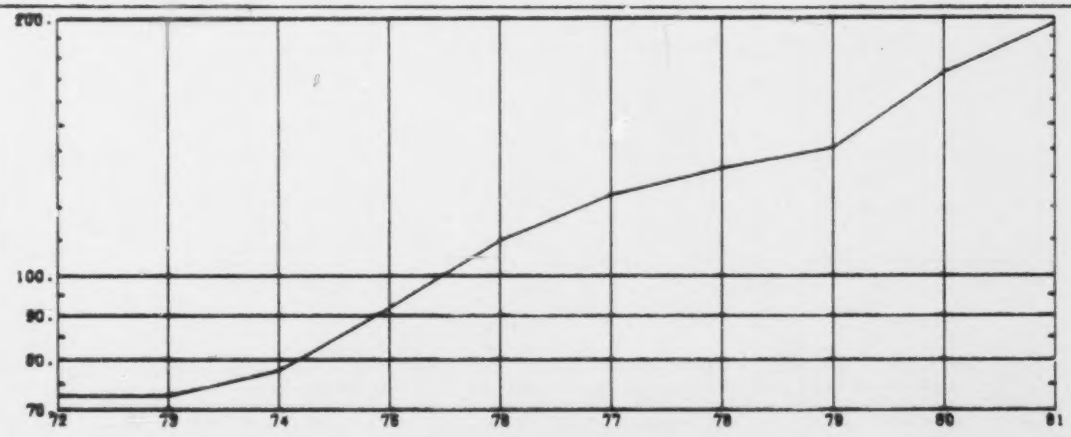
CHART 14
GAS UTILITY RESIDENTIAL REVENUE AND CONSUMPTION RATIOS



THERMS PER CUSTOMER



REVENUE PER THERM

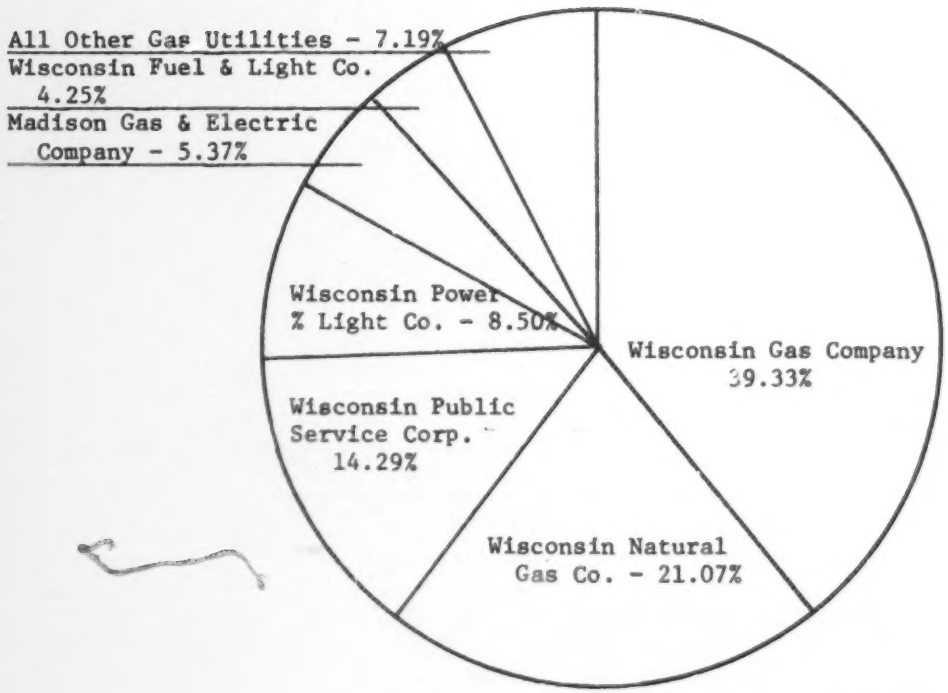


(RATIO SCALES)

REVENUE PER CUSTOMER

CHART 15

Revenues of Wisconsin Gas Utilities
In Percent of Total Sales to Ultimate Consumers
1981


All Other Gas Utilities - 7.19%
Wisconsin Fuel & Light Co. 4.25%
Madison Gas & Electric Company - 5.37%
Wisconsin Power & Light Co. - 8.50%
Wisconsin Gas Company 39.33%
Wisconsin Public Service Corp. 14.29%
Wisconsin Natural Gas Co. - 21.07%

1/ Wisconsin Southern Gas Co. - 2.31%
Northern States Power Co. - 2.23
Lake Superior District Power Company - 1.05
Superior Water, Light & Power Company - 0.71
City Gas of Antigo - 0.28
Class C Private - 0.29
Midwest Natural Gas Co. - 0.25
Muny Gas Co. (Municipal) - 0.07

Revenue and Consumption Ratios

The following table shows average revenue per therm, therms sold per customer and revenue per customer for each of the principle classes of service.

	1981	1980	1979
Revenue Per Therm			
Residential - General	54.4¢	42.5¢	35.5¢
Residential - Space Heating	46.9	37.8	29.9
Commercial and Industrial - Firm	40.1	32.6	25.4
Commercial and Industrial - Interruptible	36.6	30.1	23.4
Commercial and Industrial - Space Heating	42.3	34.5	26.9
Therms Per Customer			
Residential - General	362	406	397
Residential - Space Heating	1,266	1,437	1,539
Commercial and Industrial - Firm	47,842	48,158	49,575
Commercial and Industrial - Interruptible	475,551	644,076	717,190
Commercial and Industrial - Space Heating	7,604	8,829	9,098
Revenue Per Customer			
Residential - General	$ 197	$ 173	$ 141
Residential - Space Heating	593	544	461
Commercial and Industrial - Firm	19,174	15,707	12,579
Commercial and Industrial - Interrupt.	174,015	194,163	167,529
Commercial and Industrial - Space Heating	3,220	3,049	2,448

Revenue per therm increased for all customer classifications in 1981. Therms sold per customer decreased for all consumer classifications. Revenue per customer increased for all classes of service except for commercial and industrial interruptible. Chart 14 presents a comparison of average residential bills and consumption over a 10-year period. Although consumption has remained relatively constant in recent years the cost per therm and the total bills have increased sharply.

Gas Utility Plant Statistics

Table 14 supplies a summary of operating and plant statistics of the gas utility industry in Wisconsin. Over 99.9% of the 3,196 million therms delivered to mains in 1981 was natural gas. Almost 19,214 miles of main were in service at the close of 1981, exclusive of that owned by the pipeline companies. This represents a 0.9% increase over a year earlier.

Data on Individual Utilities

Individual company statistics for 1981 are presented in Table 15. Chart 15 shows a breakdown by company of total sales to ultimate consumers. The Wisconsin Gas Company accounted for 39.5% of total sales revenue from ultimate consumers and the five largest utilities made up 88.5% of the total.

TABLE 12

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN GAS UTILITIES 1/
1981-1979

	1981	1980	1979
Operating Revenues			
Sales to Ultimate Consumers	$1,336,542,388	$1,174,687,366	$973,569,574
Sales to Other Gas Utilities	4,591,867	2,562,392	2,436,277
Total Sales of Gas	$1,341,134,255	$1,177,249,758	$976,005,851
Other Operating Revenues	10,935,925	8,939,464	9,426,515
Total Operating Revenues	$1,352,070,180	$1,186,189,222	$985,432,366
Operating Expenses			
Production			
Liquified Petroleum Gas	$ 233,813	$ 200,743	$ 667,754
Purchased Gas - Natural	1,088,028,151	939,833,682	742,969,549
Storage	673,028	766,231	573,234
Total Production and Expense	$1,088,934,992	$ 940,800,656	$744,210,537
Transmission and Distribution	47,237,798	44,168,981	38,144,370
Customer Accounts	27,185,499	21,425,481	19,827,145
Customer Services	10,666,893	8,382,282	7,167,999
Sales Promotion	1,020,627	893,245	748,998
Administrative and General	45,370,616	39,900,405	35,398,498
Total Operation and Maintenance	$1,220,416,425	$1,055,571,050	$845,497,547
Depreciation 2/	41,507,602	38,656,219	37,690,000
Taxes Other than Income Taxes	18,461,759	16,093,733	16,187,926
Income Taxes	20,605,252	25,101,885	31,872,769
Total Operating Expenses	$1,300,991,038	$1,135,422,887	$931,248,242
Net Operating Revenues	$ 51,079,142	$ 50,766,335	$ 54,184,124

1/ Excluding out-of-state operations except where noted.
2/ Including amortization of plant acquisition adjustments, conversion costs, and other utility plant not subject to charges for depreciation.

TABLE 13

SALES TO ULTIMATE CUSTOMERS BY CLASSES
WISCONSIN GAS UTILITIES 1/
1981-1979

	1981	1980	1979
Revenue from Gas Sold to Ultimate Consumers			
Residential - General	$ 21,363,037	$ 20,619,554	$ 18,972,830
Residential - Space Heating	509,216,977	451,685,890	363,066,244
Commercial and Industrial - Firm	186,832,872	169,337,129	146,037,983
Commercial and Industrial - Interruptible	347,333,351	285,226,088	252,968,438
Commercial and Industrial - Space Heating	260,363,363	233,801,620	177,432,355
Interdepartmental	11,432,788	14,017,085	15,091,724
Total	$1,336,542,388	$1,174,687,366	$ 973,569,574
Therms of Gas Sold to Ultimate Consumers			
Residential - General 2/	39,244,547	48,478,107	53,476,442
Residential - Space Heating	1,086,779,939	1,193,977,127	1,212,995,487
Commercial and Industrial - Firm	466,170,105	519,187,164	575,571,186
Commercial and Industrial - Interruptible	949,200,299	946,148,251	1,082,957,321
Commercial and Industrial - Space Heating	614,838,494	676,934,740	659,356,934
Interdepartmental	35,689,993	50,381,039	70,375,534
Total	3,191,923,377	3,435,106,428	3,654,732,904
Average Number of Customers			
Residential - General 2/	108,453	119,492	134,701
Residential - Space Heating	858,340	830,709	788,026
Commercial and Industrial - Firm	9,744	10,781	11,610
Commercial and Industrial - Interruptible	1,996	1,469	1,510
Commercial and Industrial - Space Heating	80,853	76,673	72,472
Interdepartmental	9	9	9
Total	1,059,395	1,039,133	1,008,328

1/ Excluding out-of-state operations.
2/ The decline in residential consumption and customers is due to the transfer of residential customers to the space heating classification when gas furnaces are installed.

TABLE 14

OPERATING AND PLANT STATISTICS
WISCONSIN GAS UTILITIES 1/
1981-1979

	1981	1980	1979
Disposition of Gas Delivered to Mains (Therms)			
Gas Sold in Wisconsin			
To Ultimate Consumers	3,191,923,377	3,435,106,428	3,654,732,904
To Other Gas Utilities	10,845,000	11,895,000	12,174,911
Total	3,202,768,377	3,447,001,428	3,666,907,815
Gas Used by Company	6,252,766	6,328,768	6,630,404
Total Sold and Used	3,209,021,143	3,453,330,196	3,673,538,219
Gas Unaccounted for	(12,365,309)	(12,168,827)	(20,566,925)
Gas Delivered to Mains	3,196,655,834	3,441,161,369	3,652,971,294
Percentage of Gas Unaccounted for	(0.39)%	(0.35)%	(0.56)%
Gas Produced (Therms)			
Liquefied Petroleum Gas	80,623	103,782	1,150,374
Natural Gas Purchased (Therms)			
From Michigan-Wisconsin Pipe Line Company	2,819,382,558	3,055,271,141	3,269,755,770
From Natural Gas Pipe Line Co.	73,792,598	77,930,015	78,654,914
From Midwest Gas Transmission Company	35,661,097	38,782,622	46,938,863
From Northern Natural Gas Company	268,961,395	268,487,535	256,033,355
Total Natural Gas Purchased	3,197,797,648	3,440,471,313	3,651,382,902
Total Gas Produced and Purchased	3,197,878,271	3,440,575,095	3,652,533,276
Net Inventory Change	(1,222,437)	586,274	438,018
Gas Delivered to Mains	3,196,655,834	3,441,161,369	3,652,971,294
Miles of Distribution and Transmission Mains	19,214	19,039	18,711

1/ Excluding out-of-state operations.
2/ Not including transmission mains owned by pipeline companies.

TABLE 15

CONDENSED SUMMARY OF 1981 OPERATIONS
INDIVIDUAL GAS UTILITIES 1/

Utilities	Operating Revenue 2/	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Net Operating Revenues	Therms Sold 2/	Therms Produced	Therms Purchased 3/	Therms Produced and Purchased	Average Number of Customers 2/
Class A and B											
City Gas Co. of Antigo	$ 3,813,206	$ 3,734,896	$ 60,697	$ 38,381	$ (13,962)	$ (6,806)	9,503,418	0	9,368,503	9,368,503	3,272
Lake Superior District Power Co.	14,225,036	13,[illegible]9,282	180,938	101,687	(33,580)	116,709	46,120,887	0	45,697,740	45,697,740	6,736
Madison Gas & Elec. Co.	72,544,076	63,[illegible]94,579	3,557,141	1,466,163	623,348	3,502,845	160,224,925	2,893	160,882,492	160,885,385	66,955
Midwest Natural Gas Co.	3,418,337	3,177,207	104,943	44,781	27,335	64,071	10,459,382	2,202	10,097,052	10,099,254	3,441
Northern States Power Co.	30,146,249	26,449,400	1,244,685	378,215	640,077	1,433,872	64,421,614	0	67,005,022	67,005,022	30,791
Superior Water, Light & Power Co.	9,555,651	8,622,903	380,409	161,420	111,940	278,979	24,582,618	9,689	24,857,733	24,867,422	8,975
Wisconsin Fuel & Light Co.	57,435,239	54,380,975	1,073,915	516,690	309,906	1,153,753	147,691,680	1,693	146,902,463	146,904,156	36,951
Wisconsin Gas Company	531,769,369	474,191,827	16,330,793	7,070,258	12,690,321	21,486,170	1,227,837,000	0	1,223,493,311	1,223,493,311	403,963
Wisconsin Natural Gas Company	284,943,480	258,895,688	8,931,954	3,974,110	1,856,640	11,285,088	684,896,397	0	686,191,150	686,191,150	213,455
Wisconsin Power & Light Co.	114,925,819	104,143,734	4,055,648	1,686,838	1,075,018	3,964,581	257,718,000	943	255,849,943	255,850,886	97,767
Wisconsin Public Service Corp.	193,273,544	177,491,074	4,462,609	2,441,400	2,843,252	6,035,209	474,540,179	0	472,562,663	472,562,663	146,180
Wisconsin Southern Gas Co.	31,273,444	27,787,232	986,244	508,568	413,584	1,577,816	81,531,545	1,146	81,876,472	81,877,618	36,539
Subtotal	$1,347,323,450	$1,216,128,797	$41,369,976	$18,388,511	$20,543,879	$50,892,287	3,189,527,645	18,566	3,184,784,544	3,184,803,110	1,055,025
Class C & D 4/											
Elroy Gas, Inc.	790,477	695,654	13,935	12,336	8,131	60,421	2,089,640	0	2,018,016	2,018,016	443
Muny Natural Gas Co. 5/	891,235	860,114	16,196	13,345	0	1,580	2,833,147	0	2,778,820	2,778,820	661
Natural Gas. Inc.	1,074,962	944,002	36,665	13,306	19,443	61,546	2,892,640	0	2,839,590	2,839,590	639
St. Croix Valley Natural Gas Co.	1,990,056	1,787,858	70,830	34,261	33,799	63,308	5,425,305	62,057	5,376,678	5,438,735	2,628
Subtotal	$ 4,746,730	$ 4,287,628	$ 137,626	$ 73,248	$ 61,373	$ 186,855	13,240,732	62,057	13,013,104	13,075,161	4,371
Total All Utilities	$1,352,070,180	$1,220,416,425	$41,507,602	$18,461,759	$20,605,252	$51,079,142	3,202,768,377	80,623	3,197,797,648	3,197,878,271	1,059,396

( ) Denotes Negative Figure.
1/ Data includes Wisconsin operations only.
2/ Includes Interdepartmental Sales and Sales for Resale.
3/ Out-of-state sales by Lake Superior District Power and Wisconsin Public Service Corporation were subtracted from the therms purchased figure to give an estimated figure for Wisconsin only.
4/ There is no Class D private gas utilities.
5/ Municipally owned.

TELEPHONE UTILITY SUMMARY

Comparative statistics of telephone utilities in Wisconsin during the period 1979-1981 are presented in this session. In addition, selected data over a 10-year period are presented in Chart 16. The coverage is summarized below:

Table 16 - Comparative Statement of Revenues and Expenses, Wisconsin Telephone Utilities, 1981-1979
Table 17 - Stations served and Miles of Pole Lines, Wisconsin Telephone Utilities, 1981-1979
Table 18 - Condensed Summary of 1981 Operations, Individual Telephone Utilities

Chart 16 - Comparison of Revenues and Expenses, Wisconsin Telephone Utilities, 1972-1981

Telephone Utility Revenues and Expenses

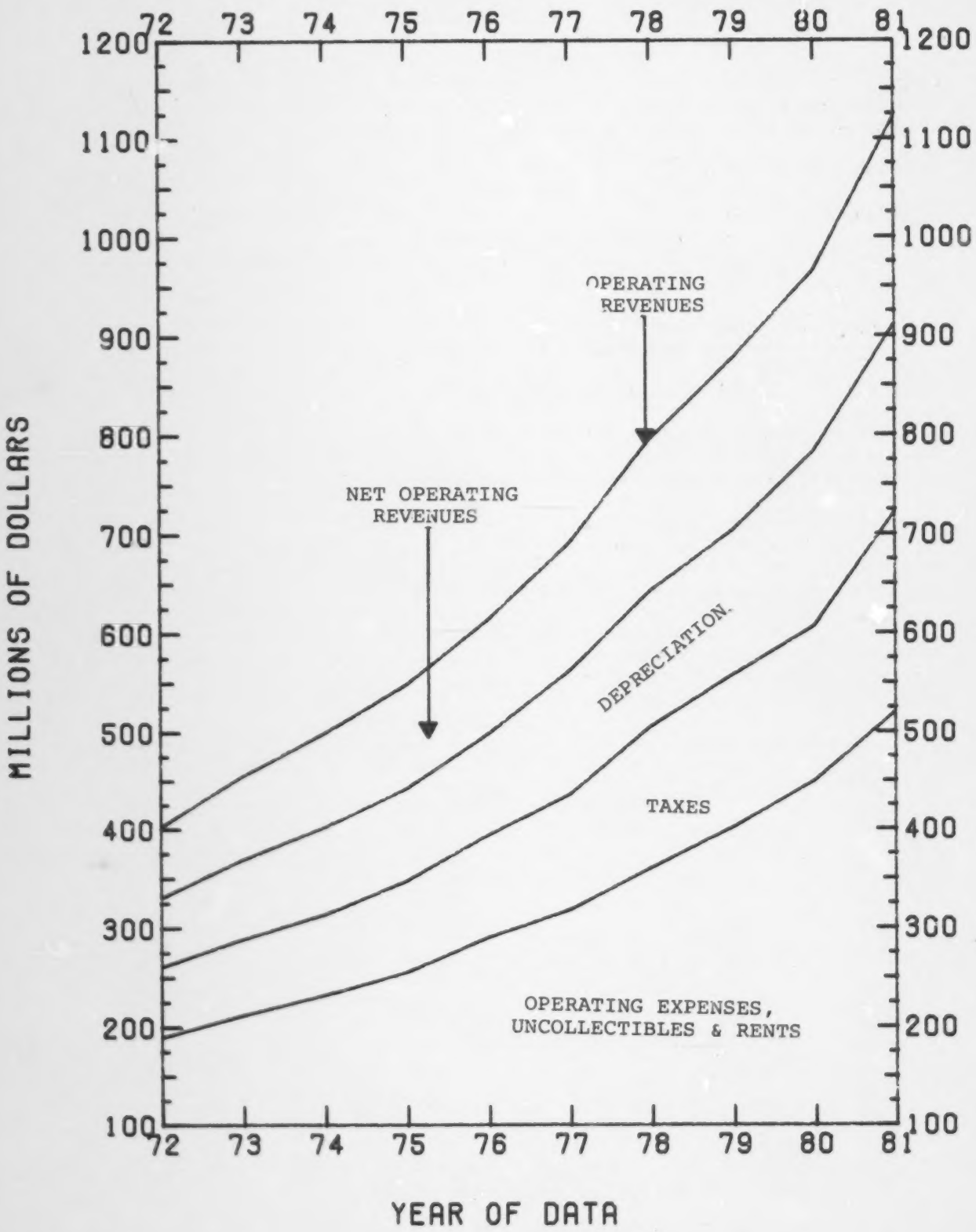
Table 16 shows that telephone revenues in Wisconsin rose over $155.7 million in 1981, a rise of 16.1%. Total operating expenses were up about $128.2 million and net operating revenue rose about $27.6 million or 15.1%.

Toll service revenues increased more rapidly than local service revenues during the year, rising 18.6% as compared to 14.7%. All major categories of expense rose during the year. General services and licenses showed the greatest increase with 52.9% followed by maintenance expense with 20.4%.

Operating revenues, operating expenses, and net operating revenues are compared below on a per station basis over a 10-year period. These ratios are based on the average number of stations for each year.

Year	Total Operating Revenue Per Station	Total Operating Expense Per Station	Net Operating Revenue Per Station
1981	$ 321.12	$ 261.10	$60.02
1980	271.10	220.00	51.10
1979	251.35	201.66	49.69
1978	234.21	188.94	45.27
1977	210.18	170.96	39.22
1976	195.33	158.71	36.63
1975	183.44	147.81	35.63
1974	174.65	140.68	33.96
1973	166.43	135.04	31.39
1972	155.60	127.95	27.65

CHART 16
WISCONSIN TELEPHONE UTILITIES REVENUES AND EXPENSES



Station Data

Station data is presented in Table 17. About 495,000 stations were in service at the close of 1981, 1.9% less than in the preceding year. Extension stations accounted for 33.5% of the total and another 11.3% are connected to private branch or centrex exchange systems. Main stations totaled about 1,928,118 in 1981. The decline in the 1981 figures shown below are the result of customers buying their own instruments. The utilities only report instruments owned by the company.

Station growth over the last ten years is analyzed below:

	Index Numbers of Telephones in Service 1972-100			
Year	Main	PBX	Extension	Total
1981	124	125	160	134
1980	124	130	167	137
1979	122	126	163	134
1978	119	125	157	131
1977	116	120	150	126
1976	112	116	140	120
1975	109	112	127	115
1974	106	109	117	110
1973	103	105	108	105
1972	100	100	100	100

Individual Companies

Table 18 presents individual company data for each of the 108 companies operating in the State. The Wisconsin Telephone Company alone accounted for 70.9% of the revenues and served 67.4% of the stations. General Telephone Company accounted for another 15.9% of the total revenues and served 15.4% of the stations.

United Telephone Company data was not included in the total data due to insufficient information filed by the utility for the calendar year 1981.

TABLE 16

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN TELEPHONE UTILITIES
1981-1979

	1981	1980	1979
Operating Revenues			
Exchange Service Revenue	$ 514,355,505	$448,392,456	$417,084,633
Toll Service Revenue	546,266,457	460,724,547	410,242,451
Miscellaneous Operating Revenue	61,875,034	57,650,593	49,486,876
Total Operating Revenues	$1,122,496,996	$966,767,596	$876,813,960
Operating Expenses			
Maintenance Expense	$ 204,274,247	$169,603,320	$150,694,090
Traffic Expense	41,708,240	40,245,988	40,372,609
Commercial Expense 1/	108,364,270	93,972,705	82,177,215
General and Miscellaneous Expense	145,932,222	133,326,242	116,571,604
General Services and Iicenses	20,313,970	13,280,219	12,076,853
Total Operation and Maintenance	$ 520,592,949	$450,428,474	$401,892,371
Depreciation and Amortization	189,654,458	176,666,078	146,001,613
Taxes Other than Income Taxes	103,732,334	82,030,752	73,583,278
Income Taxes	98,718,534	75,412,454	82,011,064
Total Operating Expenses	$ 912,698,275	$784,537,758	$703,488,326
Net Operating Revenue	$ 209,798,721	$182,229,838	$173,325,634

1/ Includes uncollectible bills.

TABLE 17

STATIONS SERVED BY WISCONSIN
TELEPHONE COMPANIES
1981-1979

	December 31, 1981 2/	December 31, 1980	December 31, 1979
Main Stations 1/	1,928,385	1,930,953	1,897,686
Centrex and PBX Stations	397,087	413,479	399,102
Extension Stations	1,177,783	1,221,674	1,191,688
Total Stations	3,503,255	3,566,106	3,488,476

1/ Includes pay, private line and mobile stations.

2/ The decline in number of stations reported in 1981 is due to customers buying their own instruments. The utilities only report instruments owned by the company.

TABLE 18

A SUMMARY OF 1981 OPERATIONS

FOR INDIVIDUAL TELEPHONE UTILITIES

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPN. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	TOTAL STATIONS CLOSE OF YEAR
AMERY TELEPHONE COMPANY	1,461,929	564,827	496,967	128,959	-619	1,190,133	271,795	6,703
AMHERST TELEPHONE COMPANY	954,606	341,240	336,654	71,765	-4,396	745,264	209,342	4,271
BADGER TELEPHONE COMPANY INC	525,991	204,615	108,181	36,692	62,533	412,021	113,969	1,973
BADGER STATE TELEPHONE COMPANY,INC	1,389,924	603,718	332,510	114,548	84,825	1,135,602	254,322	6,051
BALDWIN TELEPHONE EXCHANGE	937,887	285,240	248,447	76,477	72,429	682,593	255,294	4,031
BAYLAND TELEPHONE INC	311,789	160,971	98,331	21,811	-2,246	278,866	32,922	1,681
BELMONT TELEPHONE COMPANY	207,662	104,615	42,021	10,314	3,857	160,807	46,856	1,107
BERGEN TELEPHONE COMPANY	50,030	26,569	11,078	1,414	3,172	42,233	7,796	291
BLACK EARTH TELEPHONE COMPANY	307,509	141,156	57,693	20,449	33,485	252,783	54,727	1,637
BLOOMER TELEPHONE COMPANY	514,595	176,663	127,638	36,649	52,546	393,496	121,098	3,805
BONDUEL TELEPHONE COMPANY	404,147	217,019	86,372	25,432	29,561	358,383	45,764	2,349
BRUCE TELEPHONE COMPANY, INC	438,775	158,098	62,046	31,620	16,667	268,431	170,344	1,630
BURLINGTON BRIGHTON & WHEATLAND TEL	860,902	384,034	143,231	64,245	87,489	678,999	181,903	4,011
CASCO TELEPHONE COMPANY	278,170	121,770	85,950	17,636	6,766	232,122	46,049	1,434
CENCOM OF WISCONSIN, INC.	6,278,558	2,766,353	1,229,962	564,981	435,840	4,997,136	1,281,422	23,792
CENTRAL STATE TELEPHONE COMPANY	2,882,350	1,025,405	647,686	229,763	278,295	2,181,148	701,202	9,139
CHEQUAMEGON TELEPHONE COOP INC	2,343,876	850,447	519,270	218,490	0	1,588,207	755,669	7,349
CHIBARDUN TELEPHONE COOPERATIVE INC	1,345,003	577,194	503,736	111,200	0	1,192,130	152,873	7,133
CHIPPEWA COUNTY TELEPHONE INC	713,769	304,313	173,672	42,640	68,308	588,933	124,835	3,648
CITIZENS TELEPHONE COOPERATIVE INC	369,208	147,864	119,806	18,517	0	286,187	83,021	2,191
CLEAR LAKE TELEPHONE COMPANY, INC	326,362	182,574	95,450	23,251	-1,532	299,744	26,619	1,763
COCHRANE COOPERATIVE TELEPHONE CO	216,119	109,059	72,303	13,651	0	195,013	21,106	1,459
COON VALLEY FARMERS TELEPHONE CO	290,126	152,585	68,828	18,084	7,215	246,712	43,415	2,653
CRANDON TELEPHONE COMPANY	706,390	296,065	202,763	56,290	8,048	563,166	143,224	2,687
CREAM VALLEY TELEPHONE COMPANY	831,096	279,675	202,731	61,852	141,288	685,546	145,550	2,963
CUBA CITY TELEPHONE EXCHANGE COMPANY	491,659	184,514	89,881	34,900	42,438	351,733	139,926	2,375
DICKEYVILLE TELEPHONE CORPORATION	275,366	136,842	57,272	14,830	7,205	216,148	59,219	1,427
DODGE COUNTY TELEPHONE COMPANY	316,936	147,542	73,025	19,651	26,752	266,970	49,966	1,384
FAIRWATER BRANDON ALTO TELEPHONE CO	377,396	167,414	92,315	27,740	9,501	296,970	80,426	1,689
FARMERS INDEPENDENT TELEPHONE CO	548,071	226,247	125,896	39,264	46,198	437,605	110,466	2,976
FARMERS TELEPHONE COMPANY	1,609,874	546,369	408,837	128,651	152,736	1,236,593	373,281	8,130
FENNIMORE TELEPHONE COMPANY	591,193	273,641	153,773	40,643	8,770	476,827	114,366	2,912
FOOTVILLE TELEPHONE COMPANY	266,743	124,943	86,835	19,562	-1,067	230,273	36,470	1,223
FORESTVILLE TELEPHONE COMPANY, INC	507,824	194,023	107,035	28,422	76,626	406,107	101,717	2,243
FREDERIC TELEPHONE COMPANY	956,442	490,026	136,738	81,839	90,643	799,251	157,191	2,333

TABLE 18 (CONTINUED)

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPN. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	TOTAL STATIONS CLOSE OF YEAR
GENERAL TELEPHONE COMPANY OF WISC	178,619,597	70,687,057	41,078,390	16,460,828	13,934,407	142,160,682	36,458,915	539,972
GREENWOOD TELEPHONE COMPANY	458,689	213,847	87,207	29,714	51,052	381,820	76,869	2,118
HAGER CITY TELEPHONE COMPANY	567,672	274,692	170,607	42,408	-2,450	485,256	82,416	2,436
HAMMOND TELEPHONE COMPANY	232,844	123,154	50,672	12,862	-2,612	184,076	48,768	1,136
HEADWATERS TELEPHONE COMPANY	1,801,918	539,973	461,097	155,664	70,110	1,226,843	575,075	4,267
HILLSBORO TELEPHONE COMPANY INC	445,084	187,152	120,238	31,207	6,518	345,115	99,969	1,988
LA CROSSE TELEPHONE CORPORATION	19,204,939	7,907,093	4,258,950	1,740,069	1,416,345	15,322,457	3,882,483	64,218
LAKEFIELD TELEPHONE COMPANY	367,105	157,829	110,967	22,410	-2,017	289,190	77,915	1,810
LAKELAND TELEPHONE COMPANY	931,727	318,378	162,118	76,823	171,051	728,370	203,358	3,083
LAKESHORE TELEPHONE COMPANY	444,898	246,800	121,999	31,057	1,601	401,458	43,440	1,893
LARSEN-READFIELD TELEPHONE COMPANY	643,594	227,462	138,135	45,724	93,256	506,576	137,019	2,838
LA VALLE TELEPHONE COOPERATIVE, INC	348,181	188,823	92,762	21,611	0	303,195	44,985	2,017
LEMONWEIR VALLEY TELEPHONE COMPANY	828,142	260,753	228,967	62,081	44,399	596,199	231,943	3,039
LUCK TELEPHONE COMPANY	413,839	154,691	116,095	27,670	24,796	323,253	90,586	2,401
MADELINE ISLAND TELEPHONE COMPANY	59,737	44,179	9,216	3,750	71	57,216	2,520	356
MANAWA TELEPHONE COMPANY, INC	617,917	271,111	153,803	45,439	32,177	502,531	115,386	2,619
MAPLE TELEPHONE COOPERATIVE, INC	69,295	28,049	13,930	4,601	0	46,580	22,715	388
MARQUETTE ADAMS TELEPHONE COOP INC	867,456	294,607	230,339	70,801	0	595,797	271,659	3,106
MID-PLAINS TELEPHONE INCORPORATED	5,033,806	1,562,223	1,277,915	459,003	341,276	3,640,417	1,393,389	18,759
MIDWAY TELEPHONE COMPANY	2,470,129	759,727	547,957	203,583	282,138	1,793,405	676,724	8,899
MILLTOWN MUTUAL TELEPHONE COMPANY	430,982	185,081	152,926	27,944	-1,060	364,891	66,090	2,217
MONDOVI TELEPHONE COMPANY	651,574	304,477	182,857	50,173	-4,860	532,648	118,926	3,220
MONROE COUNTY TELEPHONE COMPANY	3,311,068	1,522,376	652,834	318,402	206,872	2,700,483	610,585	12,317
MOSEL CENTERVILLE TELEPHONE COMPANY	1,056,193	444,904	258,601	75,786	93,314	872,605	183,588	5,139
MOSINEE TELEPHONE COMPANY	883,069	496,046	272,017	72,898	-9,066	831,894	51,175	4,790
MOUNT HOREB TELEPHONE COMPANY	770,792	356,256	152,413	55,817	5,007	569,493	201,298	4,354
MOUNT VERNON TELEPHONE COMPANY	1,730,285	722,610	425,055	147,470	115,939	1,411,073	319,212	7,633
NELSON TELEPHONE COOPERATIVE	996,578	501,361	284,397	81,478	0	867,236	129,343	5,133
NIAGARA TELEPHONE COMPANY	926,682	469,960	217,426	74,914	5,733	768,032	158,650	4,212
NORTHEAST TELEPHONE COMPANY	1,208,452	468,369	328,047	86,390	61,850	944,656	263,796	6,297
NORTH-WEST TELEPHONE COMPANY	22,946,549	8,097,095	5,409,831	2,134,323	1,477,931	17,109,179	5,837,369	75,592
NOVYS TELEPHONE COMPANY	99,708	46,497	19,728	4,744	0	70,969	28,739	712
OGEMA TELEPHONE COMPANY	241,553	142,742	76,693	14,180	-3,242	230,373	11,179	1,312
OSCEOLA TELEPHONE COMPANY	804,107	296,736	145,619	58,807	109,467	610,629	193,478	3,279
PEOPLES TELEPHONE CO (MOUNT HOPE)	562,892	235,367	124,316	33,642	62,343	455,667	107,225	2,571

TABLE 18 (CONTINUED)

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPN. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	TOTAL STATIONS CLOSE OF YEAR
PEOPLES TELEPHONE CO, THE (RANDOLPH)	1,369,685	680,773	340,999	122,914	11,502	1,156,187	213,497	7,894
PLATTEVILLE TELEPHONE COMPANY	4,0[illegible]326	1,676,151	763,615	414,815	292,918	3,147,499	917,326	10,473
POPLAR TELEPHONE COMPANY INC	846	88,428	43,487	10,994	25,219	168,129	39,718	892
INDIANHEAD TELEPHONE CO.	[illegible],258	233,031	190,006	53,830	108,826	585,693	209,565	1,890
PRICE COUNTY TELEPHONE COMPANY	1,200,872	411,705	312,796	108,992	61,566	895,059	305,813	3,987
RHINELANDER TELEPHONE COMPANY	2,971,911	1,175,197	732,851	269,056	202,608	2,379,713	592,198	15,336
RIB LAKE TELEPHONE COMPANY	265,214	123,780	57,426	17,752	8,604	207,562	57,651	1,365
RICHLAND GRANT TELEPHONE COOPERATIVE	650,112	350,746	174,162	45,098	0	570,006	80,106	3,444
ROCK RIVER TELEPHONE COMPANY	464,044	240,617	120,933	35,334	3,027	399,911	64,133	2,118
ST CROIX TELEPHONE COMPANY	1,376,994	465,217	493,188	109,881	73,405	1,141,691	235,303	7,909
SCANDINAVIA TELEPHONE COMPANY	763,563	235,500	204,344	50,730	84,836	575,411	188,152	2,481
SHARON TELEPHONE COMPANY	266,322	174,841	45,001	23,692	4,239	247,773	18,550	1,479
SHELL LAKE TELEPHONE COMPANY	492,696	203,651	117,956	38,645	39,483	399,734	92,962	2,519
SIREN TELEPHONE COMPANY INCORPORATED	346,529	164,620	78,654	25,422	22,410	291,106	55,423	1,960
SOLON SPRINGS TELEPHONE COMPANY	928,001	349,147	205,126	67,521	126,919	748,712	179,289	3,465
SOMERSET TELEPHONE COMPANY, INC	298,429	152,871	57,730	21,442	7,242	239,284	59,145	1,450
SOUTHEAST TELEPHONE CO OF WISC, INC	1,667,486	679,334	353,166	143,352	94,741	1,270,592	396,894	8,111
SPRING VALLEY TELEPHONE COMPANY, INC	219,325	105,444	37,091	12,887	13,987	169,408	49,917	1,289
STATE LONG DISTANCE TELEPHONE CO	2,041,704	913,514	450,674	194,880	110,306	1,669,375	372,329	9,549
STOCKBRIDGE & SHERWOOD TELEPHONE CO	738,369	351,688	153,704	47,283	79,395	632,069	106,300	2,988
SULLIVAN TELEPHONE COMPANY	409,721	185,653	101,101	28,407	22,482	337,644	72,076	2,195
TENNEY TELEPHONE COMPANY	235,831	96,604	54,088	16,145	14,372	181,209	54,622	1,363
THORP TELEPHONE COMPANY	832,625	372,571	141,063	69,810	66,790	650,235	182,390	2,790
TRI-COUNTY TELEPHONE COOP, INC	935,899	494,368	268,579	72,474	0	835,421	100,478	5,122
TURTLE LAKE TELEPHONE COMPANY INC	385,256	141,305	85,090	24,898	12,893	264,186	121,070	1,470
UNION TELEPHONE COMPANY	820,247	338,273	203,764	63,649	27,857	633,543	186,704	4,053
UNIVERSAL TEL CO OF NORTHERN WIS INC	1,753,870	586,809	346,170	152,306	220,455	1,305,740	448,130	5,784
URBAN TELEPHONE CORPORATION	4,586,008	1,925,348	904,991	438,682	412,983	3,682,004	904,005	23,837
VALDERS TELEPHONE COMPANY	621,002	315,490	142,993	39,778	34,245	532,505	88,498	3,140
VERNON TELEPHONE COOPERATIVE	1,230,545	641,867	368,576	96,883	0	1,107,326	123,219	8,644
VIROQUA TELEPHONE COMPANY	1,523,274	803,648	322,230	149,852	83,653	1,359,383	163,891	4,973
WAUNAKEE TELEPHONE COMPANY INC	1,063,074	422,468	214,943	76,415	113,123	826,949	236,125	4,941
WAYSIDE TELEPHONE COMPANY	310,688	162,281	83,855	26,937	1,119	274,192	36,496	1,927
WEST WISCONSIN TELEPHONE COOP, INC	1,154,611	475,789	365,365	90,339	0	931,493	223,119	5,205
WEYAUWEGA TELEPHONE COMPANY	856,525	380,372	197,665	59,257	52,831	690,125	163,400	4,723

TABLE 18 (CONTINUED)

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPN. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	TOTAL STATIONS CLOSE OF YEAR
WISCONSIN TELEPHONE COMPANY	795,592,344	389,773,213	113,707,616	74,606,800	75,504,631	653,592,260	142,000,084	2,360,279
WITTENBERG TELEPHONE COMPANY	433,646	225,153	82,862	31,029	4,845	343,889	89,757	2,405
WOOD COUNTY TELEPHONE COMPANY	6,687,318	3,064,379	1,591,496	647,653	347,340	5,650,868	1,036,450	31,241
TOTAL	1,122,496,999	520,592,950	189,654,458	103,732,334	98,718,536	912,698,278	209,798,720	3,503,255

WATER UTILITIES

Comparative statistics of water utilities operating in Wisconsin during the period from 1979 through 1981 are presented in this section. Chart 17 shows a summary of the income account over a ten-year period. The coverage is summarized below:

Table 19 - Comparative Statement of Revenues and Expenses Wisconsin Water Utilities, 1981-1979.
Table 20 - Operating and Plant Statistics, Wisconsin Water Utilities, 1981-1979.
Table 21 - Condensed summary of 1981 Operations, Individual Water Utilities

Chart 17 - Comparison of Revenues and Expenses, Wisconsin Water Utilities, 1972-1981.

Water Utility Revenues and Expenses

Chart 17 shows that revenues and expenses (with the exception of taxes) have advanced steadily over the past nine years. Taxes are up only 12% for the period while operation and maintenance expenses are up 123%, depreciation rose 78%, operating revenues rose 82% and net operating revenue increased 42%.

Revenues increased 8.8% and operating expenses were up 9.1% during 1981. Net operating revenue increased 5.4%.

Operating and Plant Statistics

The total number of water customers served decreased 0.1% in 1981 while gallons of water pumped were down 1.0%. Electric pumpage accounted for 99.9% of the total and the remainder was by internal combustion and steam engines. Total miles of main increased 0.2%.

Data on Individual Utilities

Table 21 shows selected data on each Class A and B water utility, all but three of which are municipally owned. The table also shows totals for the smaller utilities. Municipal utilities accounted for 96.1% of the total operating revenue and served 97.0% of the customers. Superior, served by Superior Water, Light, and Power Company, and Beloit and Ripon served by Wisconsin Power and Light Company, were the largest cities served by private utilities.

CHART 17
WISCONSIN WATER UTILITIES REVENUES AND EXPENSES

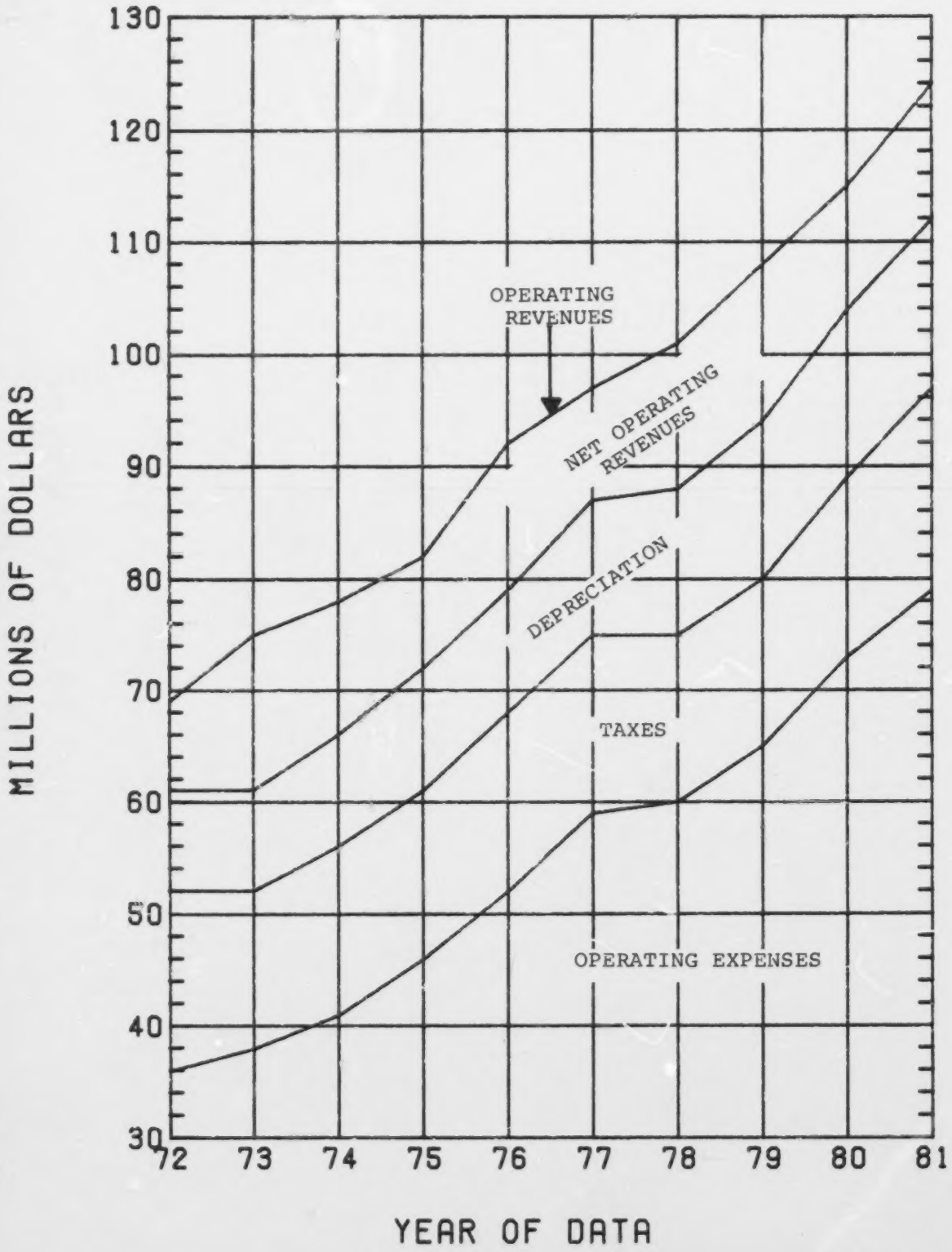


TABLE 19

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN WATER UTILITIES
1981-1979

	1981	1980	1979
All Water Utilities			
Operating Revenues			
Sales to General Consumers	$ 90,293,392	$ 83,085,455	$ 78,615,360
Interdepartmental Sales	72,289	67,684	62,086
Sales to Other Water Utilities	3,211,017	3,226,943	3,188,704
Fire Protection and Other Municipal Sales	28,272,720	25,914,631	23,968,641
Total Sales of Water	$121,849,418	$112,294,713	$105,834,791
Miscellaneous Operating Revenues	2,351,771	1,898,737	1,836,833
Total Operating Revenues	$124,201,189	$114,193,450	$107,671,624
Operating Expenses			
Source of Water Supply (Excluding Purchases)	$ 818,390	$ 1,084,458	$ 890,219
Water Purchases	3,644,040	3,786,508	3,666,573
Pumping Expenses	20,091,605	18,301,855	16,074,485
Purification	11,515,933	10,278,810	9,377,686
Total Production Expense	$ 36,069,968	$ 33,451,631	$ 30,008,963
Transmission and Distribution	20,350,067	18,415,705	16,675,448
Customer Accounts	5,881,333	5,096,049	4,688,794
Sales	18,258	14,143	11,210
Administrative and General Expenses	17,149,274	15,765,632	13,971,965
Total Operation and Maintenance Expense	$ 79,468,900	$ 72,743,160	$ 65,356,380
Depreciation and Amortization	15,397,080	14,698,339	13,924,258
Taxes Other than Income Taxes	17,408,053	15,568,767	14,617,493
Income Taxes	268,800	123,135	87,021
Total Operating Expenses	$112,542,833	$103,133,401	$ 93,985,152
Net Operating Revenues	$ 11,658,356	$ 11,060,049	$ 13,686,472

TABLE 19 (Concluded)

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN WATER UTILITIES
1981-1979

	1981	1980	1979
Private Water Utilities			
Total Operating Revenues	$ 4,854,037	$ 4,101,890	$ 3,585,103
Operation and Maintenance	$ 2,901,309	$ 2,626,573	$ 2,285,044
Depreciation and Amortization	445,037	367,850	345,281
Taxes Other than Income Taxes	367,409	317,580	325,431
Income Taxes	268,800	123,135	87,021
Total Operating Expenses	$ 3,982,555	$ 3,435,138	$ 3,042,777
Net Operating Revenues	$ 871,482	$ 666,752	$ 542,326
Municipal Utilities			
Total Operating Revenues	$119,347,152	$110,091,560	$104,086,521
Operation and Maintenance	$ 76,567,591	$ 70,116,587	$ 63,071,336
Depreciation and Amortization	14,952,043	14,330,489	13,578,977
Taxes Other than Income Taxes	17,040,644	15,251,187	14,292,062
Total Operating Expenses	$108,560,278	$ 99,698,263	$ 90,942,375
Net Operating Revenues	$ 10,786,874	$ 10,393,297	$ 13,144,146

TABLE 20

OPERATING AND PLANT STATISTICS
WISCONSIN WATER UTILITIES
1981-1979

	1981	1980	1979
Average Number of Customers			
Residential	826,192	827,896	824,082
Commercial	85,746	84,537	78,372
Industrial	7,230	7,330	7,125
Total	919,168	919,763	909,579
Private Utilities	27,451	27,290	27,112
Municipal Utilities	891,717	892,473	882,467
Total	919,168	919,763	909,579
Gallons of Water Pumped Into Distribution System (000 Omitted)			
Electric	201,094,484	203,041,410	207,405,924
Internal Combustion	20,686	4,370	8,650
Steam	1,125	1,375	0
Total	201,116,295	203,047,155	207,414,574
Private Utilities	5,226,616	5,088,672	5,217,522
Municipal Utilities	195,889,679	197,958,483	202,197,052
Total	201,116,295	203,047,155	207,414,574
Miles of Distribution Main on December 31			
Private Utilities	363	368	366
Municipal Utilities	13,228	13,197	12,945
Total	13,591	13,565	13,311

TABLE 21

CONDENSED SUMMARY OF 1981 OPERATIONS
INDIVIDUAL WATER UTILITIES

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Total Operating Expenses	Net Operating Revenues	Average Number of Customers 1/
Private Utilities								
Class A & B								
Lake Superior District Power Co. (LSDP)	$ 3,566	$ 13,633	$ 2,639	$ 4,253	$ (10,000)	$ 10,525	$ (6,959)	375
Superior Water, Light & Power Co. (SWLP)	1,773,463	1,157,970	140,461	138,689	30,503	1,467,623	305,840	9,572
Wisconsin Power & Light Co. (WPL)	2,873,693	1,580,470	268,376	208,268	245,657	2,302,771	570,922	15,789
Subtotal	$ 4,650,722	$ 2,752,073	$ 411,476	$ 351,210	$ 266,160	$ 3,780,919	$ 869,803	25,736
12 Class D Water Utilities 2/	$ 203,315	$ 149,236	$ 33,561	$ 16,199	$ 2,640	$ 201,636	$ 1,679	1,941
Total Private Utilities	$ 4,854,037	$ 2,901,309	$ 445,037	$ 367,409	$ 268,800	$ 3,982,555	$ 871,482	27,677
Municipal Utilities								
Class A								
Appleton	$ 2,559,280	$ 1,795,598	$ 239,764	$ 293,595	$ 0	$ 2,328,957	$ 230,323	19,695
Cudahy	1,064,247	600,817	124,135	136,858	0	861,810	202,437	5,154
Eau Claire	1,761,907	1,184,966	240,474	302,530	0	1,727,970	33,937	16,056
Fond du Lac	975,797	808,786	108,344	133,376	0	1,050,506	(74,709)	12,122
Glendale	779,626	481,159	111,559	89,883	0	682,601	97,025	4,399
Green Bay	3,481,749	1,871,375	398,206	362,495	0	2,632,076	849,673	28,424
Janesville	836,361	722,348	127,561	166,499	0	1,016,408	(180,047)	16,417
Kaukauna	382,838	254,976	66,459	70,491	0	391,926	(9,088)	3,776
Kenosha	3,398,608	1,848,598	351,079	397,706	0	2,597,383	801,225	22,990
La Crosse	1,506,728	1,046,502	148,560	169,837	0	1,364,899	141,829	14,764
Madison	5,327,192	3,386,192	549,595	746,602	0	4,682,389	644,803	45,078
Manitowoc	1,500,734	785,122	176,151	189,665	0	1,150,938	349,796	10,855
Marinette	716,204	437,026	81,564	102,978	0	621,568	94,636	4,442
Marshfield	698,923	363,786	56,843	71,958	0	492,587	206,336	5,861
Milwaukee	25,374,459	16,716,562	2,586,953	3,954,399	0	23,257,914	2,116,545	158,190
Neenah	1,073,328	664,486	120,811	137,661	0	922,958	150,370	7,877
Oshkosh	1,780,242	1,100,566	173,278	203,853	0	1,477,697	302,545	16,368
Racine	3,542,503	2,635,762	329,013	414,881	0	3,379,656	162,847	28,056
Sheboygan	1,491,043	1,014,499	153,486	210,955	0	1,378,940	112,103	16,224
South Milwaukee	790,017	618,403	62,411	101,565	0	782,379	7,638	5,837
Waukesha	2,536,975	1,693,653	295,687	292,360	0	2,281,700	255,275	12,630
Wausau	1,078,022	812,063	150,538	148,835	0	1,111,436	(33,414)	11,710
Wauwatosa	2,154,834	1,573,299	180,548	289,350	0	2,043,197	111,637	15,552
West Allis	2,200,278	1,966,279	199,189	358,135	0	2,523,603	(323,325)	19,056
Wisconsin Rapids	1,026,658	616,998	94,122	147,419	0	858,539	168,119	6,605
Subtotal	$68,038,553	$44,999,821	$7,126,330	$9,493,886	$ 0	$61,620,037	$6,418,516	508,138

TABLE 21 (Concluded)

CONDENSED SUMMARY OF 1981 OPERATIONS
INDIVIDUAL WATER UTILITIES

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Total Operating Expenses	Net Operating Revenues	Average Number of Customers 1/
Municipal Utilities (Continued)								
Class B								
Allouez	$ 461,734	$ 374,491	$ 70,301	$ 58,842	$ 0	$ 503,634	$ (41,900)	4,575
Ashland	415,249	330,840	35,413	50,286	0	416,539	(1,290)	2,839
Beaver Dam	514,810	401,858	51,235	62,290	0	515,383	(573)	5,210
Brown Deer	513,233	354,450	75,650	88,549	0	518,649	(5,416)	3,280
Cedarburg	317,082	198,067	34,735	47,399	0	280,201	36,881	2,637
Chippewa Falls	625,454	403,225	68,833	107,171	0	579,229	46,225	3,938
De Pere	401,089	296,402	58,727	76,948	0	432,077	(30,988)	4,409
Greendale	489,259	384,791	53,054	76,926	0	514,771	(25,512)	4,521
Menasha, Twn. S.D. #4	684,801	459,682	104,741	9,770	0	574,193	110,608	3,694
Menasha,	979,567	781,721	78,268	97,331	0	957,320	22,247	4,846
Menomonee Falls	693,070	494,333	102,097	126,319	0	722,749	(29,679)	4,751
New Berlin	766,362	340,720	137,446	181,865	0	660,031	106,331	2,964
New London	177,138	172,448	23,813	29,837	0	226,098	(48,960)	2,232
Oak Creek	1,229,898	522,887	270,881	236,898	0	1,030,666	199,232	2,851
Oconomowoc	618,774	279,095	70,612	79,753	0	429,460	189,314	3,237
Platteville	458,626	262,308	72,708	56,487	0	391,503	67,123	2,532
Plymouth	248,416	254,476	20,182	30,293	0	304,951	(56,535)	2,125
Port Washington	554,114	363,889	70,186	94,160	0	528,235	25,879	2,678
River Falls	263,929	176,332	13,763	33,454	0	223,549	40,380	2,125
Shawano	243,858	153,684	38,563	33,383	0	225,630	18,228	2,848
Shorewood	386,414	400,526	15,043	22,117	0	437,686	(51,272)	3,548
Stevens Point	712,083	363,956	69,942	109,595	0	543,493	168,590	6,679
Stoughton	385,474	221,857	47,476	46,574	0	315,907	69,567	2,572
Sturgeon Bay	652,471	306,720	97,419	91,649	0	495,788	156,683	3,072
Sun Prairie	318,373	200,569	47,635	56,970	0	305,174	13,199	3,655
Two Rivers	534,464	444,311	60,665	70,348	0	575,324	(40,860)	4,595
Waterloo	72,198	36,826	7,460	9,268	0	53,554	18,644	944
Watertown	593,636	304,346	70,312	77,104	0	451,762	141,874	5,649
Waupaca	380,345	164,697	53,222	41,907	0	259,826	120,519	1,810
Waupun	379,074	254,867	37,687	36,692	0	329,246	49,828	2,699
West Bend	669,508	455,621	107,969	124,049	0	687,639	(18,131)	6,128
Whitefish Bay	340,571	260,223	62,084	44,713	0	367,020	(26,449)	4,777
Subtotal	$84,119,627	$55,420,039	$9,254,452	$11,802,833	$ 0	$76,477,324	$7,642,303	622,558
Class C 115 Utilities	21,251,283	12,822,978	3,098,355	3,070,551	0	18,991,884	2,259,399	160,254
Class D 359 Utilities	13,976,242	8,324,574	2,599,236	2,167,260	0	13,091,070	885,172	120,797
Total Municipal Utilities	$119,347,152	$76,567,591	$14,952,043	$17,040,644	$ 0	$108,560,278	$10,786,874	903,609
Total All Utilities	$124,201,189	$79,468,900	$15,397,080	$17,408,053	$268,800	$112,542,833	$11,658,356	931,286

1/ Includes fire protection, public authorities, interdepartmental and other water utility customers.
2/ There were no Private Class C utilities in 1981.
3/ ( ) Denotes negative figure.

STEAM AND HOT WATER HEATING UTILITY SUMMARY

As shown in Table 22, steam and hot water heating utility operations in Wisconsin are not very extensive. Only three utilities rendered this service in 1981.

The Wisconsin Electric Power Company, operating in the city of Milwaukee, has by far the largest heating utility in the State, serving 549 customers at the close of 1981. Its net operating revenue for the year was $1,261,767.

Other communities in which heating service was supplied during the year included Waterloo, served by a municipal utility, and Rice Lake, served by Rice Lake Steam Corporation. Rice Lake showed a gain of $4,374 while Waterloo had a loss of $17,817 for 1981.

TABLE 22

COMPARATIVE STATEMENT OF REVENUES, EXPENSES
AND STATISTICS FOR WISCONSIN STEAM AND HOT WATER
HEATING UTILITIES
1981-1979

	1981	1980	1979
Operating Revenues	$9,864,032	$8,664,808	$8,995,665
Operation and Maintenance	7,142,717	6,502,781	6,507,928
Depreciation	589,416	653,276	645,550
Taxes	883,575	538,766	1,108,563
Total Operating Expenses	$8,615,708	$7,694,823	$8,262,041
Net Operating Revenues	$1,248,324	$ 969,985	$ 733,624
Number of Customers	712	726	753